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Prevođenje engleskog jezika

**TRANSLATING MEDICAL REGISTER:
INTRODUCTION TO TRANSLATION
OF DOCTORS'/SPECIALISTS' REPORTS**

**(PREVOĐENJE MEDICINSKOG REGISTRA:
OSNOVE PREVOĐENJA
LIJEČNIČKIH/SPECIJALISTIČKIH NALAZA)**

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Finally, I dedicate this degree to my late father, who had always believed in education and hard work, and who, unfortunately, passed away during the second semester of my master's program. I love you Dad.

Plagiarism statement

I, Dean Ibrahimagić, a master's student at the University of Tuzla, hereby declare that I have written this master's thesis myself, under my mentor's guidance. All the quotations, whether from books or internet articles, are acknowledged.

Date: December 06, 2018

Dean Ibrahimagić

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Sažetak

Magistarski rad naslovljen „*Translating Medical Register - Introduction to Translation of Doctors'/Specialists' Reports*” (*Prevođenje medicinskog registra - Osnove prevođenja liječničkih/specijalističkih nalaza*) detaljno opisuje liječnički/specijalistički nalaz kao dokument za prijevod. To je redovno prevođena vrsta dokumenata, koju većina stalnih sudskih tumača za engleski jezik za područje Federacije Bosne i Hercegovine uglavnom nema priliku prevoditi na dodiplomskom studiju, drugim riječima, prije imenovanja za stalne sudske tumače. S obzirom da nije pronađen nijedan objavljen rad na ovu temu u Federaciji Bosne i Hercegovine, a shvaćajući njegovu potrebu, obavljeno je istraživanje s ciljem opisivanja ove vrste teksta. Ovaj rad pruža uvid u učestalost njihovog prevođenja, prosječnu dužinu ovih tekstova, omjer smjera prevođenja, njihovu uobičajenu strukturu, vrstu teksta, kao i karakteristike, navodeći prednosti i nedostatke prevođenja ove vrste dokumenata onako kako ih vide sami sudski tumači za engleski jezik za Federaciju Bosne i Hercegovine. Triangulacijom, podacima dobijeni kvantitativnom metodom (analizom rezultata ankete) i kvalitativnom metodom (analizom baze podataka jednog sudskog tumača za engleski jezik za područje Federacije Bosne i Hercegovine, drugim riječima podataka iz njegovih Dnevnika prijevoda i ovjera), su potvrđene glavna i pomoćne hipoteze. Ovaj rad dokazuje da su liječnički/specijalistički nalazi redovno prevođena vrsta teksta u Federaciji Bosne i Hercegovine, da se radi o kraćim tekstovima slične strukture, rasporeda i vrste teksta, da za prevoditelje/tumače predstavljaju određen izazov, a da najveću poteškoću u prevođenju predstavljaju skraćenice koje liječnici/specijalisti koriste u svojim nalazima. Također je potvrđeno da se velika većina sudskih tumača susreće sa ovom vrstom teksta tek nakon imenovanja za stalne sudske tumače. Doprinos ovog rada ogleda se u detaljnom prikazu jedne zastupljene vrste teksta u praksi stalnih sudskih tumača za engleski jezik za Federaciju Bosne i Hercegovine i mogao bi se koristiti na dodiplomskom ili master studiju kao materijal za upoznavanje studenata sa medicinskim registrom i prevođenjem liječničkih/specijalističkih nalaza.

Ključne riječi:

Liječnički nalaz, specijalistički nalaz, medicinski registar, prijevod, tumač, prevodilac

Abstract

The master's thesis titled "*Translating Medical Register - Introduction to Translation of Doctors'/Specialists' Reports*" thoroughly describes the physician's/specialist's report as a document for translation. It is a regularly translated type of document, which most certified (court) interpreters for the English language for the Federation of Bosnia and Herzegovina do not have an opportunity to translate at the undergraduate program; in other words, before they are appointed as certified (court) interpreters, as a bachelor's degree is a requirement for the appointment. Regarding the fact that no paper on this topic has been found published in the Federation of Bosnia and Herzegovina, and realizing the need for it, the research has been conducted with the objective to describe this type of text. The paper provides an insight into the frequency of their translation, the average length of these texts, directionality ratio, their usual structure, text type, as well as their properties, stating advantages and disadvantages of translating this type of document as reported by certified interpreters for the English language for the Federation of Bosnia and Herzegovina themselves. By means of triangulation, using the data obtained by a quantitative method (the analysis of the results of a survey) and a qualitative method (the analysis of a certified (court) interpreter's database, the data from his Register of translations and verifications), the primary and the secondary hypotheses have been confirmed. The thesis demonstrates that physicians'/specialists' reports are a regularly translated type of text in the Federation of Bosnia and Herzegovina, they are short, have a similar structure, layout, and text type, they pose a certain challenge to translators/interpreters, and the greatest difficulty in translating arises from abbreviations used by physicians/specialists in their reports. Moreover, it has been confirmed that a great majority of certified (court) translators/interpreters get a chance to translate this type of text only after they are appointed as certified (court) translators/interpreters. The contribution of this paper is seen in a detailed display of a commonly translated type of document in the practice of certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. It may be used at undergraduate or Master's study to provide students an insight into medical register and translation of physicians'/specialists' reports.

Key words:

Physician's report, specialist's report, medical register, translation, interpreter, translator

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INTRODUCTION

This master's thesis is about medical register; however, its focus is on the study of practice of translation of doctors'/specialists' reports by certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, and its aim is to thoroughly depict this type of text and the challenges they pose to translators/interpreters.

This area is worthwhile studying because medical translation is in high demand, and it requires particular cognizance of medicine and medical register from translators/interpreters. For some reason, in the Federation of Bosnia and Herzegovina, English language students do not receive any such training at the first cycle degree program, and a bachelor's degree is a precondition to becoming a certified (court) translator/interpreter for the English language for the Federation of Bosnia and Herzegovina.

With regard to personal motivation behind this paper, the authors have decided to write a thesis on this subject, because they have realized how many years it had taken them to acquaint themselves to a certain degree with translation of medical register, and doctors'/specialists' reports in particular. As it has been said, neither of them has any medical education; nor had they been formally trained to translate this type of text at their undergraduate degree program; in other words, before they were appointed as certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. They want to share their experience and knowledge of translating these documents with all those who want to learn from it. It may not be the perfect course book; but it may be a stepping-stone to a better one.

The activity of certified translators/interpreters in the Federation of Bosnia and Herzegovina has significantly increased since 1995, and especially after the legislative regulations were imposed, further regulating this activity (The current regulation on court interpreters "The Federation of Bosnia and Herzegovina Gazette", number 29/14 dated April 16, 2014). This is the result of the presence of international organizations and authorities in our country, as well as employment of our citizens in international companies. Therefore, there has been demand for translation of medical register, which has become common in the practice of certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. As the majority of English language students, potential certified translators/interpreters, in the Federation of Bosnia and Herzegovina do not have an opportunity to translate or encounter these documents at the first cycle degree program, this paper examines the necessity of it.

Undoubtedly, these texts, as well as any other, pose certain challenges to translators/interpreters and have their own advantages and disadvantages with regard to their translation over other types of texts; therefore, the goal of the thesis is to explore and describe them.

Translation is required and present in all the spheres of human activity. The enormous range of fields presents a real problem for translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. Unlike colleagues from some other countries in which translators/interpreters specialize in certain fields (law, medicine, literature, etc.), and even subspecialize (internal medicine, cardiology, obstetrics and gynecology, etc.), certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina are expected to translate every type of text, whether literary or professional/technical. According to Racoma (2017), the reason many translators do not even try to translate medicine is the fact that they do not have medical qualification and therefore do not feel qualified enough. This is understandable, as according to her, medicine has a vast glossary of terms, approximately 20,000, excluding the words for diseases, medications and body parts; and it has different branches, specialties, etc.

Although Angelelli (2004, pp. 133-134) discusses medical interpreting, what she says may apply to translation, too. She believes that “it is essential to separate medical, community, court, and conference interpreting and consider the different pressures inherent in interactions in each of these settings”.

One of the biggest difficulties in translating medical documents is lexis and occasional non-existence of equivalence in the target language, especially if a document refers to new diagnostic equipment or procedures.

It is unaccountable that future translators/interpreters for the English language for the Federation of Bosnia and Herzegovina are not, by and large, trained in translation of medical register, as according to translationservices24.com (2016), that is a unique field and those who translate medical texts need ‘an academic qualification in medicine’. Moreover, the entry about medical translation in *Wikipedia* (n.d.) says, “Aside from linguistic skills, it requires specific training and subject matter knowledge in order to translate medical content. This is because of the highly technical, sensitive and regulated nature of medical texts.” As for the importance of the training, Racoma (2017) says, in one of her online blogs, that not all translators translate medical documents, because they must have not only ‘excellent linguistic skills in their chosen language pair’, but ‘must have knowledge of the subject matter and received specific training’. That both, formal training in medical interpreting and an academic qualification in medicine, is desirable, if not mandatory, is shown in an online article titled *Medical Interpreter*, posted on

the Massasoit Community College website (“Medical Interpreter”, 2018), which talks about a formal training for medical interpreters. It says that their 60-hour program teaches ‘working knowledge of medical interpreting, including standards of practice, ethics, HIPAA regulations, cultural competency, and medical terminology/vocabulary’. As of medical background of medical interpreters, the same article talks about a woman who has become a medical interpreter, saying that she had worked as a certified nursing assistant for more than a decade prior to taking the Medical Interpreter certificate program at Massasoit Community College. Medical translation is nothing new; on the contrary. According to Fischbach (1998), this type of translation could be the oldest and the most widespread form of scientific translation; however, Angelelli (2004) says that training in medical interpreting is new compared to training in court interpreting or conference interpreting. She says in her book that some universities provide on-line education and organize workshops for medical interpreters to teach them medical terminology, protocols and standards of practice.

Although much has been said about medical translation, especially in online articles, by medical interpreters themselves, it is still vague whether medical translation is categorized under scientific or technical language. The following are two citations in which two authors classify medical translation differently. Pedersen & Halliday (2009, p. 7) say that Jody Byrne differentiates between ‘scientific and technical language’ and according to him, medical language should be categorized as scientific because those texts are used to discuss, confirm, provide reasons, etc. Unlike Byrne’s division, Recalde (2017) talks about medical translation as a type of technical translation when describing what makes it different from other technical translations. According to her, it is ‘its multiple register’. She says that there are usually two types of register, a medical, or more elevated, register, and a colloquial, or a lower, register. One of the examples she uses are the terms thorax and chest, where the former is used in medical, elevated, register, and the latter in colloquial, lower, register.

The aim of the paper is not to present doctors’/specialists’ reports as documents most difficult to translate, as they are certainly not; but to show that these documents have certain characteristics that make them unique as a text type. Many authors have shown that some things make this type of document unique. According to an online article (“Medical Report Translation”, n.d.), the language style is one of the challenges that translators face when translating medical reports, because being written in haste, doctors’/specialists’ reports are usually hard to understand.

The paper explains the peculiarities of translation of doctors’/specialists’ reports the way certified translators/interpreters for the English language for the Federation of Bosnia and

Herzegovina see them. To get the answers to our questions, and test our hypotheses, two types of research, a qualitative and a quantitative one, have been undertaken, to get the most objective results possible.

The primary hypothesis is that physicians'/specialists' reports are regularly translated documents by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. The first secondary hypothesis is that physicians'/specialists' reports share certain characteristics, which, with regard to their translation, pose certain challenges to translators/interpreters and are regarded as advantages and disadvantages over translation of other types of texts. The second secondary hypothesis is that the biggest problem for the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina with translation of physicians'/specialists' reports is posed by abbreviations used in the reports. The third secondary hypothesis is that translators/interpreters for the English language for the Federation of Bosnia and Herzegovina do not, by and large, receive any formal training in medical translating prior to appointment as certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina.

The quantitative research is conducted with 65 respondents from different municipalities in the Federation of Bosnia and Herzegovina. It produces a better understanding of how frequently medical documents and doctors'/specialists' reports are translated by certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, whether they had received any formal training in translating these documents prior to their appointment, and gives their opinion on the biggest advantages and disadvantages of their translation.

The qualitative research analyzes a translator's/interpreter's database of translations, in other words, the data stored in his registers of translations. According to the data, the paper establishes the frequency of the translation of doctors'/specialists' reports, medical document share, the directionality, the text type predominantly used in the reports, the documents' usual content, and the average number of words in a doctor's/specialist's report. The paper also gives examples, according to which the type of text, the usual content and the layout of a doctor's/specialist's report is described. It further specifies the advantages and disadvantages of their translation, as seen by the particular translator/interpreter. Moreover, the paper provides ample examples of translations of physicians'/specialists' reports, issued in different countries, by different kinds of specialists, translated from L1 into L2 and vice versa; all to provide

doctors'/specialists' report translation 101¹ and facilitate translation of this type of text for someone who has not done it before.

The results of the triangulation show that doctors'/specialists' reports are regularly translated documents by the largest group of the survey respondents and the study discusses the challenges of their translation, for which certified translators/interpreters are not prepared prior to their appointment. The biggest problem for translators/interpreters translating these documents is posed by medical abbreviations.

This master's thesis is aimed at future translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, as an introduction to translation of doctors'/specialists' reports, and medical register in general. The paper may be presented to new Master students at translation program. The thesis may also suggest the authorities that it is a high time to offer specializations to certified (court) translators/interpreters.

The limitation of this paper is the fact that the data collected refers to a small geographic region, one of the two entities in Bosnia and Herzegovina, and that the time span observed is one decade.

To reiterate, the paper indicates the problem that most translators/interpreters do not get any formal training in translation of medical register prior to appointment, at first-cycle study program. Therefore, this thesis calls into question the need for such training. The goal of this thesis is physicians'/specialists' reports 101. It should depict physicians'/specialists' reports, regularly translated documents, as seen by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, and provide material for the introduction of medical register and translation of doctors'/specialists' reports to future certified translators/interpreters for the English language in order to help them overcome the most common problems.

¹ According to Urban dictionary (www.urbandictionary.com/define.php?term=101) 101 means introduction, basics (e.g. Russian propaganda posters 101)

LITERATURE REVIEW

Although the paper relies heavily upon the research findings and the authors' decade long experience in translation of medical register and doctors'/specialists' reports in particular, the available literature on the topic has helped the authors to understand the whole process better and has confirmed their findings.

Much has been said about challenges of translating medical register, mostly by translators/interpreters themselves on translating agencies' websites and blogs; however, there has been no research conducted nor have there been any articles published on this topic in and for the Federation of Bosnia and Herzegovina.

As of medical translation, the *Wikipedia* entry on Medical translation ("Medical translation", n.d.) defines it as technical, clinical, marketing, software, curriculum and regulatory translation required or tasked by healthcare providers, pharmaceutical companies or agencies, etc. National laws generally require medicines and medical devices to be accompanied by leaflets or other material translated into the official language or languages of the country. Health care professionals and patients also have medical documents issued in a foreign language translated in order to understand them. The entry continues saying that medical translation, due to the nature of the texts, requires not only the language proficiency, but also the knowledge of the subject matter, which is in big part gained through specialized training.

In the Federation of Bosnia and Herzegovina, official translation is done by certified (court) interpreters who are appointed by the Federal Minister of Justice. Although appointed as court interpreters, they are expected to translate all kinds of documents. The numerous fields pose an enormous problem for translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. Unlike colleges from some other countries, in which translators/interpreters specialize in certain fields (law, medicine, literature, etc.) and even sub-specialize (e.g. poetry, prose, or comedy), the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina are expected to translate all kinds of texts, literary and professional/technical, qualitatively and in a short period of time. Racoma (2017) says that medical translation is highly specialized and therefore many translators do not even try doing it, believing they lack proper medical qualification. She emphasizes the vastness of medical terminology, with approximately 20,000 terms, excluding the ones used for diseases, medications and body parts. She continues explaining the requirements for medical translators, saying that they would benefit from having a degree in medicine, that they have to know

medical terminology and speak two languages or more fluently. She also says that sometimes certification is required, such as that from the National Board of Certification for Medical Interpreters (CMI) prior to appointment as a medical translator. She suggests specialization, especially to beginners, due to too many medical texts, believing it is impossible to do them all, at least in the early stage of their interpreting career.

When discussing the diversity of translations, Gouadec (2007, p. 11) says, “The most common classification is by subject matter or ‘domain’.” He lists “translation of medical documents (biomedical or pharmaceutical for instance): medical translation” as one of the categories. Gouadec (2007, p. 31) also writes about the importance of the expertise in the field, saying,

Biomedical and pharmaceutical translators deal with documents in the area of medicine and the pharmaceutical industry. As in the case of legal translation, translators in these areas usually require the professional expertise of the physician or pharmacist, especially for the more sensitive documents (e.g. drug marketing applications). There has therefore been a big demand in this market segment for qualified doctors and pharmacists willing to work as translators. Alternatively, doctors or pharmacists may revise work done by professional translators, until the latter acquire the necessary expertise.

An example of such specialization is the Medical Interpreting training provided in the American state of Massachusetts. There, they are aware of the fact that „Medical interpreters need much more than conversational fluency in a second language to meet the needs of patients with limited proficiency in English.” (“Massachusetts Medical Interpreter Training”, 2018)

Another example of certification and the Healthcare Interpreter Program is Language-specific 60-Hour Healthcare Interpreter Program - approved by the Oregon Health Authority. As a requirement to receive the OHA-approved certificate, the comprehensive 60-hour program is comprised of three parts. The first part teaches human anatomy, diseases, procedures, treatments, etc. in English, whereas the second part teaches the same in a non-English language. Part 3 teaches standards, ethics, consecutive and simultaneous interpreting, and role boundaries. The program also provides the final assessment of the students.

Some authors classify medical translation as technical translation, some as scientific translation. According to Sutcliffe de Moraes (2010), “Technical translation includes medical, scientific, engineering, legal, financial and other non-literary areas.” Unlike the aforementioned author, Fischbach (1998, p. 1) says that medical translation could be the oldest and most universal form of scientific translation.

The title of this thesis is *Translating medical register - Introduction to translation of doctors'/specialists' reports*, so let us explain what the register is. Catford (1965, p. 85) defines register as “a (language) variety related to the wider social role being played by the performer at the moment of utterance: e.g. ‘scientific’, ‘religious’, ‘civil-service’, etc.’ He (p. 89) continues explaining that, “By register we mean a variety correlated with the performer’s social role on a given occasion.” He (p. 90) also says, “In translation, the selection of an appropriate register in the TL is often important.”

It is a good thing that B/C/S, just like English, has medical register, which makes the rendition of medical documents, or doctors'/specialists' reports in particular, possible.

Nordquist (2018) defines the register in linguistics as a certain style of language that people use in certain situations. He continues saying that we opt for particular tone, vocabulary, gestures or body language, and communicate differently in different situations, for example we will definitely not use the same language when making small talk or giving formal presentation or having a job interview.

Although some recognize only two types of register, formal and informal, according to the above author (2018), many linguists distinguish five, designated *frozen*, *formal*, *consultative*, *casual* and *intimate*. These are suggested as styles by Martin Joos (Catford, 1965, p. 90).

We are not going to explain each of these types of registers/styles. The one we are interested in is the consultative one. Nordquist (2018) describes it as the one used in conversation(s) between a person and someone offering advice, such as a specialist, for example. The consultative register/style is characterized by respectful tone. He also says that, in case a patient talks with his/her longtime family doctor, the tone may be more casual.

With regard to the different registers, Peter Newmark (1979) explains the reason for their existence in his article called *A Layman's View of Medical Translation* published in British Medical Journal. He says that European languages use far too many synonyms in their medical language register, using various words for the same condition, depending on the branches of medicine, situation, place, and time. He mentions ‘brucellosis’ as an example, saying that the zoonosis or the infectious disease contracted mainly by animals has twenty-five synonyms in English (e.g. undulant fever, undulating fever, Mediterranean fever, Malta fever, Gibraltar fever, rock fever, Crimean fever, Bang’s disease, gastric remittent fever, etc.) and half a dozen to a dozen in others.

Translation of medical register has some advantages over translation of other registers. One of them is explained by Recelde (2017). She compares medical translation with legal translation, and says that, largely, propositional or sentence meanings are equal between SL and TL as

bodies and diseases are the same all over the world. She stresses the importance of translators' awareness of different registers in medical translation saying that medical translation is probably unique among other types of translation because it has multiple registers, providing one term "in an elevated (medical) register and another in a lower (colloquial) register". An example is the word *axilla* (in medical register) or *armpit* (in colloquial register).

With regard to registers, Recelde (2017), talks about three different registers in medical translation. She talks about 'doctor-to-doctor' (or medical register, e.g. candidiasis), 'doctor-to-patient' (or general register, e.g. yeast infection), and 'patient-to-patient' register (or mixed, using one or the other term).

Another advantage of translating doctors'/specialists' reports is the fact that they are short texts, with similar structure.

A good thing about doctors'/specialists' reports being short is that translators can easily follow Mona Baker's (1992) suggestion that we should read the whole text prior to starting translating it. In the case of doctors'/specialists' reports, we can do it as many times as we need until we grasp the content of the report.

There is also a lack of temporal and cultural displacement.

As of the structure, Morton (2017) says that in order to maintain good records, doctors/specialists use "SOAP" format. According to him, "S" stands for subjective, "O" for objective, "A" for assessment, and "P" for plan.

There are reasons for doctors'/specialists' reports to be short and structured the way they are. According to the above author (2017), doctors need to keep track of a lot of information about many patients. Information is vital, and good documentation, apart from facilitating treatment may also prevent lawsuits against healthcare professionals and institutions. The "SOAP" format prevents doctors from forgetting writing down any information that may be valuable for the patients, themselves, or other healthcare professionals. So what does "SOAP" format look like? The "S" or subjective part of the report is the case history, the way the patient sees the problem. Depending whether it is the first visit to a doctor/specialist or a follow-up, this part varies in length. The "O" or objective part of the report is where doctors/specialists record vital signs, findings, test results, etc. The "A" or assessment is just that, the assessment of the problem, usually the established diagnosis/diagnoses, and all the other information on the patient's problem(s). Finally, the "P", which stands for plan, is a part of the report where doctors/physicians write down their orders with regard to the plan of treatment, medications that patients have to take, notes about follow-ups, further testing, therapies, surgical treatments, etc.

Translating doctors'/specialists' reports is very demanding and time consuming especially at the beginning of a translator's/interpreter's career; however, things get easier with time. Emma Goldsmith, a Spanish to English medical translator writes in her blog *Guidelines for translating medical reports* (2015) that she worried about translating medical reports when she started translating, but eventually learned frequent Spanish medical abbreviations, as well as ways to look up the words and phrases she does not know. She says she has also got used to doctors' handwriting and has become able to fill in the missing gaps.

One of the disadvantages of translating doctors'/specialists' reports, even today, is doctors'/specialists' handwriting. For some reasons doctors in the Federation of Bosnia and Herzegovina, mostly in local health centers still handwrite their reports. They usually write reports for patients and themselves, for possible follow-up(s), when the patient will see him/her again. The problem with such reports is not when the patient is referred to hospital, as doctors, generally, have no problem reading each other's handwriting, but when the report needs to be translated, in other words read by someone who is not a healthcare professional. Marissa Laliberte (2018), an author at Reader's Digest, says the following in her article, "Bad handwriting almost seems like a requirement for graduating med school."

González (2017) has tried to justify or explain the reasons for such bad handwriting, saying that doctors write a lot because they see a great number of patients a day and have to document everything well, which is time-consuming, and usually has to be done at the expense of legibility.

Those who translate medical documents understand what problems they face. As being said in translationservices24.com (2016), medical translation is exciting; however, very demanding, as translators/interpreters translate text that are meant to be read by another specialist(s), not laymen, such as they are. These types of texts require translators to be knowledgeable about medicine, too.

Another challenge for translators, according to an online article ("Medical Report Translation", n.d., para. 2), is the style of language, which the article describes as 'laconic' and usually 'difficult to understand', which is the consequence of doctors' haste and tiredness.

Another significant problem when translating medical documents is lexis and occasional non-existence of equivalence in the target language, especially if a document refers to new diagnostic equipment or procedures. Choquette (2016) talks about the problem saying that medical documents often use newly coined wording and vocabulary having no equivalence in the target language, and she emphasizes the necessity for translators' competence and skill in

the sub-discipline related to the document being translated, due to the fact that medicine is a field too broad.

The common problem and something our research results have confirmed as the biggest disadvantage of translating doctors'/specialists' reports by translators/interpreters for the English language for the Federation of Bosnia and Herzegovina is deciphering abbreviations used in the reports. According to Goldsmith (2015), "This is usually the most time-consuming part of the translation." However, she says she uses CAT² tools, such as SDL Trados Studio³, which enormously help translators by, among other things, allowing them to build up customized glossaries, including abbreviations, so they are on hand when needed. Unfortunately, the translators/interpreters for the English language for the Federation of Bosnia and Herzegovina mostly do not utilize this effective tool.

One more disadvantage of translating doctors'/specialists' reports for translators who do not have any medical background, and most of the translators/interpreters for the English language for the Federation of Bosnia and Herzegovina do not, is a frequent difficulty in finding pragmatic equivalence and coherence⁴ in the text. As Mona Baker (1992) says, textual coherence is an individual thing and it depends on the knowledge of the reader, his/her world experience, which is affected by person's nationality, age, sex, profession, education, etc.

As of pragmatics, (Hatim & Munday, 2004, p. 14) say that, „Not all texts are as ‘serious’ as the Bible or the works of Dickens, nor are they all as ‘pragmatic’ as marriage certificates or instructions on a medicine bottle.”

Although medical documents are regularly translated by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, not all translators have had a chance or want to translate them. This fact has been confirmed by the results of our online survey. As said by Racoma (2017), translators who translate medical documents, and not all of them do it, must be highly proficient in L1 and L2; they have been trained for it and have acquired sufficient knowledge of medicine. This is required because such texts are regulated, technical and very sensitive. Thanks to the internet, certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, just like anyone else who has access to the internet, may learn a lot about medical translation online. There are also webinars;

² According to Wikipedia - Computer-assisted translation, computer-aided translation or CAT - https://en.wikipedia.org/wiki/Computer-assisted_translation

³ According to Wikipedia - a computer-assisted translation software suite - https://en.wikipedia.org/wiki/SDL_Trados_Studio

⁴ The network of semantic relations which organize and create a text by establishing continuity of sense. (Baker, 1992)

one such is *The Language of Medical Translation: Register, Jargon and Inclusive Language* given by Dr. Karen Leube (eCPD⁵ Webinars, 2018). At the beginning of the video (the webinar), she says that medical professionals use “medicalese⁶”; therefore, translators, “as trained writers and culture intermediaries”, need to make translations which are understandable.

All the citations confirm that in the Federation of Bosnia and Herzegovina, translators/interpreters for the English language face similar, if not the same, challenges of translating medical register as their colleagues do worldwide. However, unlike some countries, which recognize the importance of specialized training and translators’ specializations, translators/interpreters for the English language for the Federation of Bosnia and Herzegovina are on their own, trying to cope with the challenges of translation that every text type poses.

⁵ eCPD Webinars. (2018). *The language of medical translation: Register, Jargon and Inclusive Language*. Retrieved July 25, 2018, from <https://www.ecpdwebinars.co.uk/downloads/the-language-of-medical-translation/>

⁶ According to the Merriam-webster online dictionary - the specialized terminology of the medical profession - <https://www.merriam-webster.com/medical/medicalese>

Research hypotheses

The primary hypothesis: Physicians'/specialists' reports are documents regularly translated by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina.

First secondary hypothesis: Physicians'/specialists' reports share certain characteristics, which, with regard to their translation, pose certain challenges to translators/interpreters and are regarded as advantages and disadvantages over translation of other types of texts.

Second secondary hypothesis: Translators/interpreters for the English language for the Federation of Bosnia and Herzegovina do not, by and large, receive any formal training in medical translation prior to appointment as certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina.

Third secondary hypothesis: The biggest problem for the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina with translation of physicians'/specialists' reports is posed by abbreviations used in the reports.

Presentation of the part of the world to be studied

This paper conducts research on translation of medical register, or doctors'/specialists' reports to be more accurate, by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. The Federation of Bosnia and Herzegovina is one of the two entities composing Bosnia and Herzegovina. The capital of the Federation of Bosnia and Herzegovina, as well as the country of Bosnia and Herzegovina, is Sarajevo. The entity consists of 79 municipalities in ten cantons, and it has a population of 2.2 million⁷. The quantitative research encompasses translators/interpreters from 35 municipalities from eight cantons. Two cantons did not have certified translators/interpreters for the English language appointed at the time the survey was conducted. The qualitative research was conducted in Lukavac, an industrial town and municipality in the northeast part of the Federation of Bosnia and Herzegovina, with a population of approximately 44,500⁸.

⁷ According to Wikipedia - https://en.wikipedia.org/wiki/Federation_of_Bosnia_and_Herzegovina

⁸ According to Wikipedia - <https://en.wikipedia.org/wiki/Lukavac>

METHODS

The thesis relies on the data collected through various methods, triangulation. Qualitative and quantitative methods have been used to get the most objective results possible.

The qualitative method has been used to obtain data from a translator's/interpreter's database (database of texts translated in the period from 2009 through 2018), in other words his register of translations, that certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina are obliged to keep according to the Regulations on the court (certified) translators/interpreters. The translator is a freelancer, with an office registered in Lukavac, and provides translation services as his part-time side job. Having analyzed the database, we have established the total number of translated documents and the percentage of the medical documents. Then, we have classified the medical documents and established the total number of physicians'/specialists' reports. The average number of words in a physician's/specialist's report has been determined, in a way that we have checked the number of words in each individual report (*MS Office option word count*). The sum of the numbers has been divided by the total number of the reports. We have also established the ratio of the directionality (L1-L2 vs. L2-L1). The database has also provided examples of translations of doctors'/specialists' reports, examples of common mistakes made by doctors/specialists, and common errors in the medical forms.

The quantitative method has been used to gather data on translation of medical documents and doctors'/specialists' reports by certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. It analyses the responses collected in an online survey called *Translation of doctors'/specialists' reports*, which consists of ten questions/statements (mostly five point Likert scale - See Appendix 3). The survey, created by using *SurveyMonkey* software (an online survey development cloud-based software⁹), has been sent via email to 65 randomly chosen certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, whose names and contact phone numbers we have found on the online list of certified (court) translators/interpreters for the English language for the Federation of Bosnia and Herzegovina maintained by the Federal Ministry of Justice, which appoints certified (court) translators/interpreters. The emails have included the informed consent statement. The goal has been to include certified translators/interpreters from as many

⁹ Wikipedia - <https://en.wikipedia.org/wiki/SurveyMonkey>

towns/cities, municipalities, and cantons in the Federation of Bosnia and Herzegovina as possible, to obtain the most objective responses to our survey statements. The aim of the research has been to find out whether the certified translators/interpreters translate medical documents, and doctors'/specialists' reports in particular, regularly, whether they had received any formal training prior to the appointment as certified translators/interpreters. It has asked the respondents about their thoughts on the advantages and disadvantages of translating these documents, how often they translate them, and what the directionality ratio (L1-L2 vs. L2-L1) is.

Having analyzed the data obtained by these two methods, we have got the answers to our research questions.

RESEARCH RESULTS AND DISCUSSION

The results of the quantitative research

In order to test our hypotheses and get an insight into the Federation of Bosnia and Herzegovina translators'/interpreters' thoughts and opinions on and experience of translating doctors'/specialists' reports, we have conducted an online survey of a sample group of randomly chosen respondents, who we had found on the Federation of Bosnia and Herzegovina Ministry of Justice's list of certified translators/interpreters. We have tried to include as many translators/interpreters from different cantons, municipalities, and cities/towns in the Federation of Bosnia and Herzegovina to get the most objective results possible.

We have managed to get the replies from 65 certified translators/interpreters (out of 321 on the current list of the certified translators/interpreters, which is 20.25 %), from 35 of 79 municipalities (44.30 %), from eight out of ten cantons (80.00 %). Two cantons do not have appointed certified translators/interpreters for the English language.

The survey consists of ten statements/questions, two statements with Yes/No answer choices, six Likert items (a symmetric agree-disagree 5 point scale) and two statements with three and four provided answer choices respectively and a blank space for 'Other' (see Appendix 3).

The survey has been distributed to the respondents via e-mail. The e-mail messages include the introductory note and the Informed consent to participate in a research study (see Appendix 2). The following are the results of the survey, their interpretation, and discussion.

Q1**I am a certified interpreter/translator.**

Answered: 65 Skipped: 0

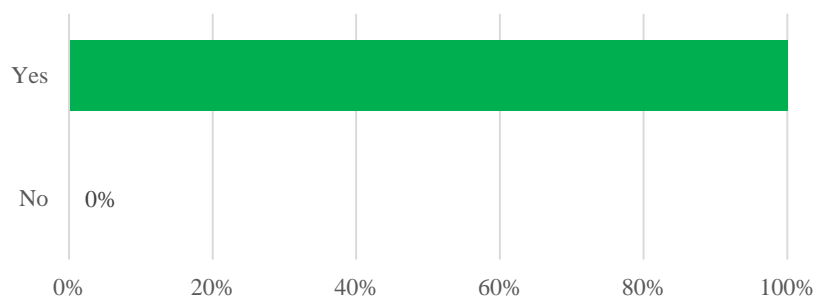


Figure 1 - Survey results - Q1 - I am a certified interpreter/translator

ANSWER CHOICES	RESPONSES	
Yes	100.00%	65
No	0.00%	0
TOTAL		65

Table 1 - Survey results - Q1 - I am a certified interpreter/translator

As it can be seen in Figure 1 and Table 1, all 65 respondents (100%) have confirmed that they are certified interpreters. These are the translators/interpreters for the English language for the Federation of Bosnia and Herzegovina appointed by the Federation of Bosnia and Herzegovina Minister of Justice.

Q2

I translate medical documents on a regular basis.

Answered: 64 Skipped: 1

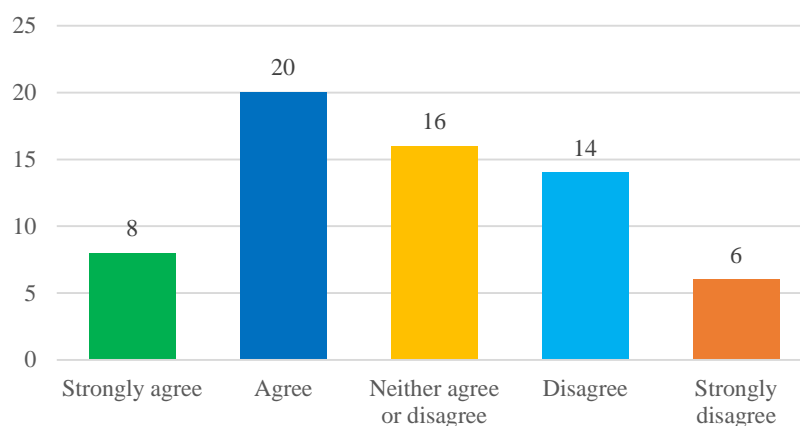


Figure 2 - Survey results - Q2 - I translate medical documents on a regular basis

ANSWER CHOICES	RESPONSES	
Strongly agree	12.50%	8
Agree	31.25%	20
Neither agree or disagree	25.00%	16
Disagree	21.88%	14
Strongly disagree	9.37%	6
TOTAL		64

Table 2 - Survey results - Q2 - I translate medical documents on a regular basis

The data show that medical documents are translated regularly by 43.75 % of the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina (those who strongly agreed and agreed with the statement), whereas 31.25 % of the respondents disagreed or strongly disagreed with the statement. We can conclude that medical documents are, by and large, regularly, we do not claim frequently, translated types of documents; however, there is a fraction of translators/interpreters that, according to the results, have not got a chance to, or, for some reason, do not translate them.

Q3

I translate doctors'/specialists' reports on a regular basis.

Answered: 65 Skipped: 0

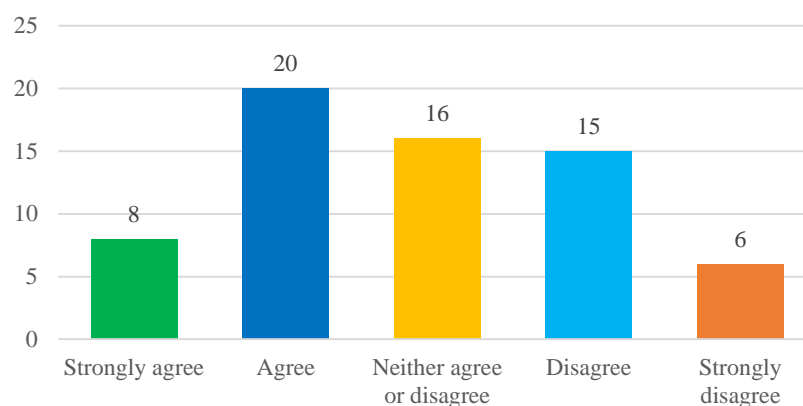


Figure 3 - Survey results - Q3 - I translate doctors'/specialists' reports on a regular basis

ANSWER CHOICES	RESPONSES	
Strongly agree	12.31%	8
Agree	30.77%	20
Neither agree or disagree	24.62%	16
Disagree	23.08%	15
Strongly disagree	9.22%	6
TOTAL		65

Table 3 - Survey results - Q3 - I translate doctors'/specialists' reports on a regular basis

According to the responses to statement 4, 43.08 % of the respondents regularly translate doctors'/specialists' reports. 32.30 % of the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina disagree or strongly disagree with the statement, in other words, do not do it. It seems that those who translate medical documents translate doctors'/specialists' reports, too, which is understandable because, as the findings of the qualitative research show, doctors'/specialists' reports are the most frequently translated type of medical documents.

Q4

Doctors'/specialists' reports are one of the most commonly translated types of documents.

Answered: 65 Skipped: 0

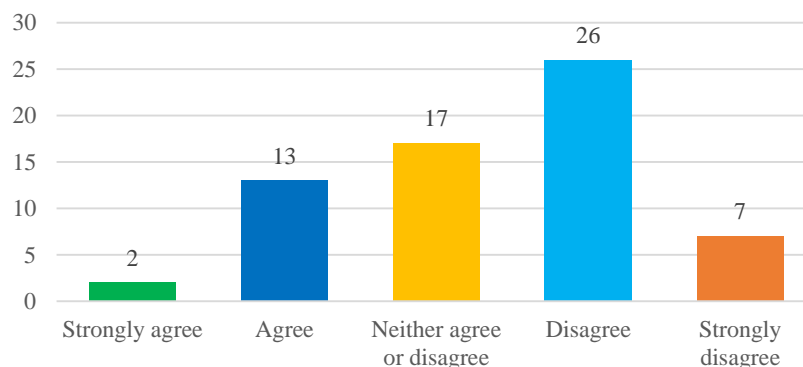


Figure 4 - Survey results - Q4 - Doctors'/specialists' reports are one of the most commonly translated types of documents

ANSWER CHOICES	RESPONSES	
Strongly agree	3.08%	2
Agree	20.00%	13
Neither agree or disagree	26.15%	17
Disagree	40.00%	26
Strongly disagree	10.77%	7
TOTAL		65

Table 4 - Survey results - Q4 - Doctors'/specialists' reports are one of the most commonly translated types of documents

A half (50.77 %) of the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina have said that doctors'/specialists' reports are not one of the most commonly translated types of documents. However, a significant percentage (23.08 %) has confirmed the statement. It can be concluded that doctors'/specialists' reports are not the most commonly translated types of documents in the practice of translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. Those are probably, the standard forms, such as the police certificates, the excerpts from the official registers of births, deaths, and marriages, high school diplomas, etc.

Q5

I mostly translate doctors'/specialists' reports from L1 into L2.

Answered: 65 Skipped: 0

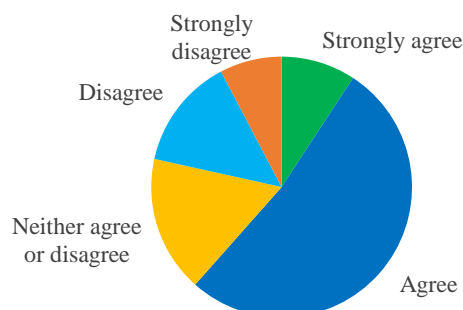


Figure 5 - Survey results - Q5 - I mostly translate doctors'/specialists' reports from L1 into L2

ANSWER CHOICES	RESPONSES	
Strongly agree	9.23%	6
Agree	52.31%	34
Neither agree or disagree	16.92%	11
Disagree	13.85%	9
Strongly disagree	7.69%	5
TOTAL		65

Table 5 - Survey results - Q5 - I mostly translate doctors'/specialists' reports from L1 into L2

Almost two thirds of the respondents (61.54 %) have stated that they mostly translate doctors'/specialists' reports from L1 into L2. Unlike them, approximately one fifth (21.54 %) of the respondents have disagreed or strongly disagreed with the statement. The fact that more doctors'/specialists' reports are translated from L1 into L2 is contrary to the old popular belief that translators should just translate into their mother tongue (L1). This belief was first promoted by Martin Luther (Kościuczuk, n.d.). However, this view has been challenged for quite some time.

Q6

Translation of doctors'/specialists' reports have more advantages than disadvantages.

Answered: 65 Skipped: 0

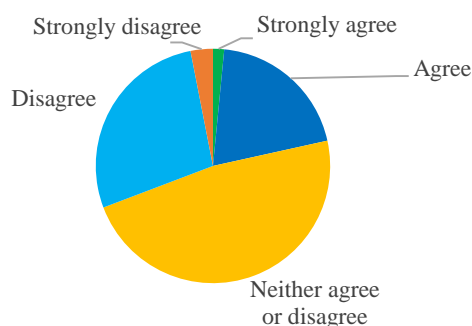


Figure 6 - Survey results - Q6 - Translation of doctors'/specialists' reports have more advantages than disadvantages

ANSWER CHOICES	RESPONSES	
Strongly agree	1.54%	1
Agree	20.00%	13
Neither agree or disagree	47.69%	31
Disagree	27.69%	18
Strongly disagree	3.08%	2
TOTAL		65

Table 6 - Survey results - Q6 - Translation of doctors'/specialists' reports have more advantages than disadvantages

According to the responses provided by the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina, translation of doctors'/specialists' reports have both advantages and disadvantages. The largest number of the respondents (47.69 %) has remained undecided whether to agree or disagree with the statement. Yet, more respondents (30.77 % compared to 21.54 %) believe that there are more disadvantages than advantages of translating this type of documents.

Q7

State the biggest advantage.

Answered: 56 Skipped: 9

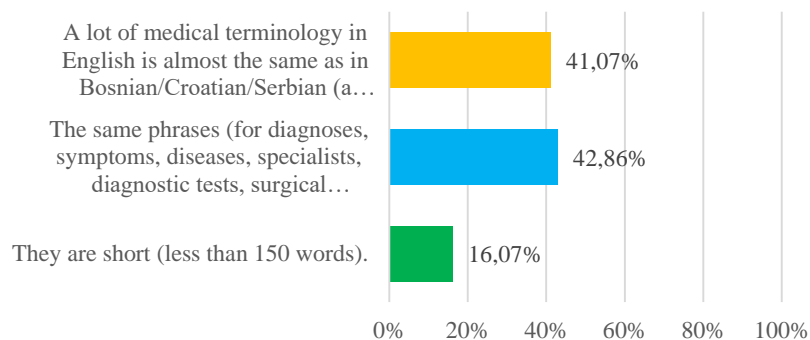


Figure 7 - Survey results - Q7 - State the biggest advantage

ANSWER CHOICES	RESPONSES	
A lot of medical terminology in English is almost the same in Bosnian/Croatian/Serbian (a fracture - <i>fraktura</i> , an internist - <i>internista</i> , therapy - <i>terapija</i> , treatment - <i>tretman</i> , anamnesis - <i>anamneza</i> , etc.).	41.07%	23
The same phrases (for diagnoses, symptoms, diseases, specialists, diagnostic tests, surgical procedures, treatment, etc.) are used repeatedly.	42.86%	24
They are short (less than 150 words).	16.07%	9
TOTAL		56

Table 7 - Survey results - Q7 - State the biggest advantage

Comments made by some of the respondents:

“A lot of medical terminology is in Latin or of Latin origin, thus similar in all languages. There are a lot of sources on the internet, and everything can be easily checked and verified.”

“Latin origin of words and awareness thereof is a huge advantage for the translator.”

“Language structure is rather simple as well as the usage of tenses.”

“This survey is not really applicable to me because although I am a certified interpreter I have never had an opportunity to translate doctors’/specialists’ reports.”

As stated in the survey, what facilitates rendition of doctors'/specialists' reports in some respect is the fact that a lot of medical terminology in English is almost the same in Bosnian/Croatian/Serbian (B/C/S). The examples of naturalized borrowing include a fracture - *fraktura*, an internist - *internista*, therapy - *terapija*, treatment - *tretman*, anamnesis - *anamneza*, infusion - *infuzija*, and many other. This belief is shared by 41.07 % of the respondents. Another mitigating circumstance is repetition of a big number of phrases, used for diagnoses, symptoms, diseases, specialists, diagnostic tests, surgical procedures, treatment, etc. This is confirmed by 42.86 % of the survey participants. The remaining 16.07 % believe that the length of these documents, less than 150 words, is the biggest advantage regarding the translation of this type of documents, as translators/interpreters may read the text quickly, as many times as required, and grasp the content (Baker, 1992) of the report prior to starting the process of translation.

According to the above-cited comments made by some of the respondents, the internet and simple language structure make translation of these documents a lot easier, too. Moreover, according to Goldsmith (2015), there are some CAT tools, which also help translators.

As one of the advantages of translating doctors'/specialists' reports is the format of the report, which is said to be standard, we have checked whether the "SOAP" format, described by Morton (2017), applies to the translations of the doctors'/specialists' reports in our database. It has been established that it does. The following is a copy of a translation of one of the doctors'/specialists' reports which we have used for the qualitative research; and it perfectly illustrates the aforesaid.

A PUBLIC HEALTH INSTITUTION - THE LUKAVAC HEALTH CENTER
 The Division of Physical Medicine and Rehabilitation
 Kulina Bana bb Street, 75300 Lukavac
 Tel.: +387 35 553 212

2280/18
 (A round stamp)

FINDINGS AND OPINION *(Specialist's report)*

First and last name: Ms. XXXXXXXXXXXXXXXXXXXXXXX

Year of birth: 1983

Place of residence: Lukavac

EXAMINATION:

Medical history: She is complaining about the pain in her lower back radiating down her left leg. She is feeling numbness down the same leg; and the pain is more severe when she is sneezing or coughing. She has been having the problems for the last 10 days, since she lifted a washtub. (S)

Findings: LS spine X-ray and CT scan (Hernia disci i.v. L5/S1 l. sin. */in Latin/*)

Status: She has been brought on a stretcher. The paravertebral muscle of the LS spine is very tense. There is a loss of lumbar lordosis. The straight leg raise (Lasègue's sign) test on the left leg is positive at approximately 45 degrees. There is hypoesthesia in the L5/S1 dermatomes to the left. The left foot dorsiflexion is $\frac{1}{4}$ short. (O)

Diagnosis: Radiculopathia LS l. sin. *(In Latin)*

Hernia disci i.v. L5/S1 *(In Latin)* (A)

Treatment: Strict rest

Cryomassage of the painful spots - twice a day

Fastum gel after the cryomassage

Ambene ampoules - 5 each - intramuscularly, every three days

Naklofen duo capsules - two a day

If the problems do not alleviate in the next 14 days, refer *(the patient)* to the Neurosurgery *(clinic)*.

Presence of another person is required, to help her perform daily activities. (P)

Date: May 28, 2018

Note: Bring the medical documentation to the follow up

Head doctor Midhat Osmanović
 A Physical Medicine and Rehabilitation Specialist
(An illegible signature)
(A rectangular stamp)

Q8

State the biggest disadvantage.

Answered: 61 Skipped: 4

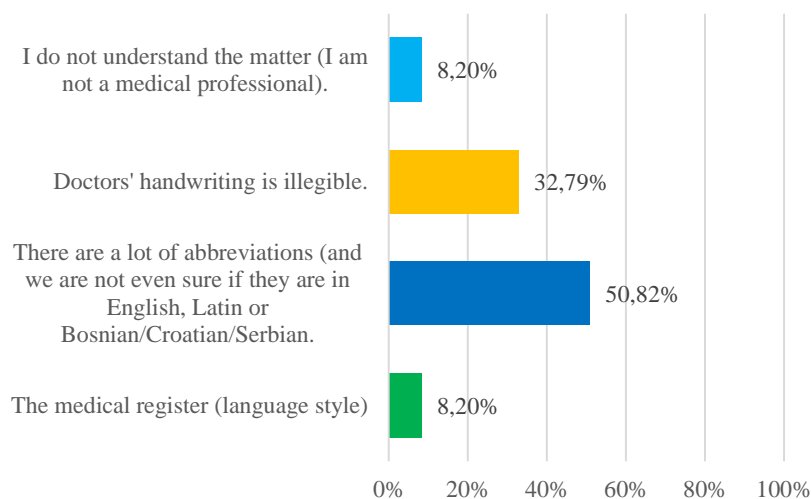


Figure 8 - Survey results - Q8 - State the biggest disadvantage

ANSWER CHOICES	RESPONSES	
I do not understand the matter (I am not a medical professional).	8.20%	5
Doctors' handwriting is illegible.	32.79%	20
There are a lot of abbreviations (and we are not even sure if they are in English, Latin or Bosnian/Croatian/Serbian.)	50.82%	31
The medical register (language style)	8.20%	5
TOTAL		61

Table 8 - Survey results - Q8 - State the biggest disadvantage

Comments made by some of the respondents:

“The fact that, as any other register, medical register requires substantial background knowledge as well as the fact that the correct interpretation of the slightest details is a must.”

“Time consuming more than ordinary translations.”

One respondent has sent one of the authors an email message after she had completed the survey. She has said the following in Bosnian, and the following is a literal translation of the text into English produced by the author; “Dear colleague, I hope you’ve received my responses to the survey statements. I believe that the biggest problem is incomprehension of the subject matter being translated and the necessity for research during the translation of a document of

this kind, which consumes a lot of time. Moreover, I think there is enormous empathy and the urge not to charge the translated report or physician's findings due to understanding what someone is suffering from or going through, so I try to make the whole thing easier for the client at least in this, financial, way. Anyway, the latter is my biggest problem; therefore, I do not like translating these documents, as I generally do it for free, to have a clean conscience."

As reported, 50.82 % of the respondents believe that the biggest disadvantage of translating doctors'/specialists' reports is a use of abbreviations, which may be in Latin, English or Bosnian/Croatian/Serbian (B/C/S); and as interpreters/translators, we do not know in which language they are, as they normally appear in all three. This result confirms one of our hypotheses. The second biggest disadvantage of translating these texts is doctors' handwriting. This opinion is shared by 32.79 % of the respondents. Laliberte (2018) says the following in her article: „Bad handwriting almost seems like a requirement for graduating med school.” Some respondents have complained about not knowing the subject matter and the medical register. This is quite normal, and it is not translators'/interpreters' mistake. It is the problem with the curriculum and the fact that no one had prepared them to translate these types of texts. Racoma (2017) says that medical translation is highly specialized and therefore many translators do not even try doing it, believing they lack proper medical qualification. She emphasizes the vastness of medical terminology, with approximately 20,000 terms, excluding the ones used for diseases, medications and body parts. She continues explaining the requirements for medical translators, saying that they would benefit from having a degree in medicine, that they have to know medical terminology and speak two languages or more fluently.

Q9

I had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before I was appointed as a certified interpreter/translator.

Answered: 62 Skipped: 0

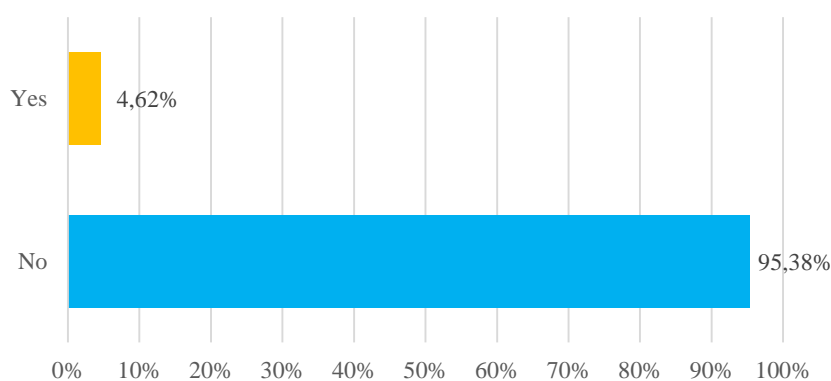


Figure 9 - Survey results - Q9 - I had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before I was appointed as a certified interpreter/translator

ANSWER CHOICES	RESPONSES	
Yes	4.62%	3
No	95.38%	62
TOTAL		65

Table 9 - Survey results - Q9 - I had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before I was appointed as a certified interpreter/translator

The obtained results confirm that just three out of sixty-five translators/interpreters (only 4.62 %) for the English language for the Federation of Bosnia and Herzegovina had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before they were appointed as certified interpreters/translators. This is inexplicable, knowing that some countries, according to Racoma (2017), require translators/interpreters to have certification, such as that from the National Board of Certification for Medical Interpreters (CMI) prior to appointment as a medical translator. She suggests specialization, especially to beginners, due to too many medical texts, believing it is impossible to do them all, at least in the early stage of their interpreting career.

Q10

If the answer to Q9 is 'Yes', had the training been adequate?

Answered: 51 Skipped: 14

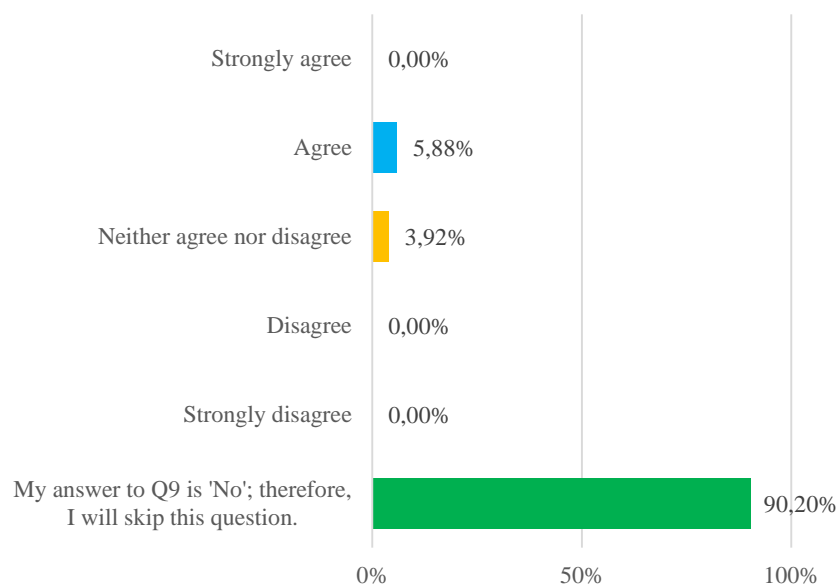


Figure 10 - Survey results - Q10 - Had the training been adequate?

ANSWER CHOICES	RESPONSES	
Strongly agree	0.00%	0
Agree	5.88%	3
Neither agree or disagree	3.92%	2
Disagree	0.00%	0
Strongly disagree	0.00%	0
My answer to Q9 is 'No'; therefore, I will skip this question.	90.20%	46
TOTAL		51

Table 10 - Survey results - Q10 - Had the training been adequate?

The three (5.88 %) interpreters/translators for the English language for the Federation of Bosnia and Herzegovina who had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before they were appointed as certified interpreters/translators have agreed with the statement that the training had been adequate. Had the training really been adequate, remains questionable, knowing that ("Language-specific 60-Hour," n.d.) such training usually lasts for 60 hours, and includes studying of anatomy and

healthcare terminology, diseases, treatments, procedures, specialties in both languages, and ethics, role boundaries, consecutive interpreting, sight translation, and simultaneous interpreting.

The results of the qualitative research

Medical documents share

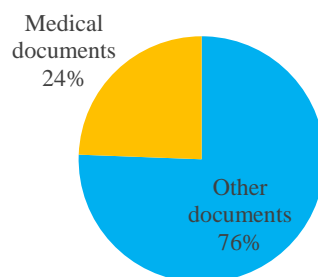


Figure 11 - Medical documents share

TYPE OF DOCUMENT		No
Medical documents	24.41%	2.282
Other documents	75.59%	7.068
TOTAL		9.350

Table 11 - Medical documents share

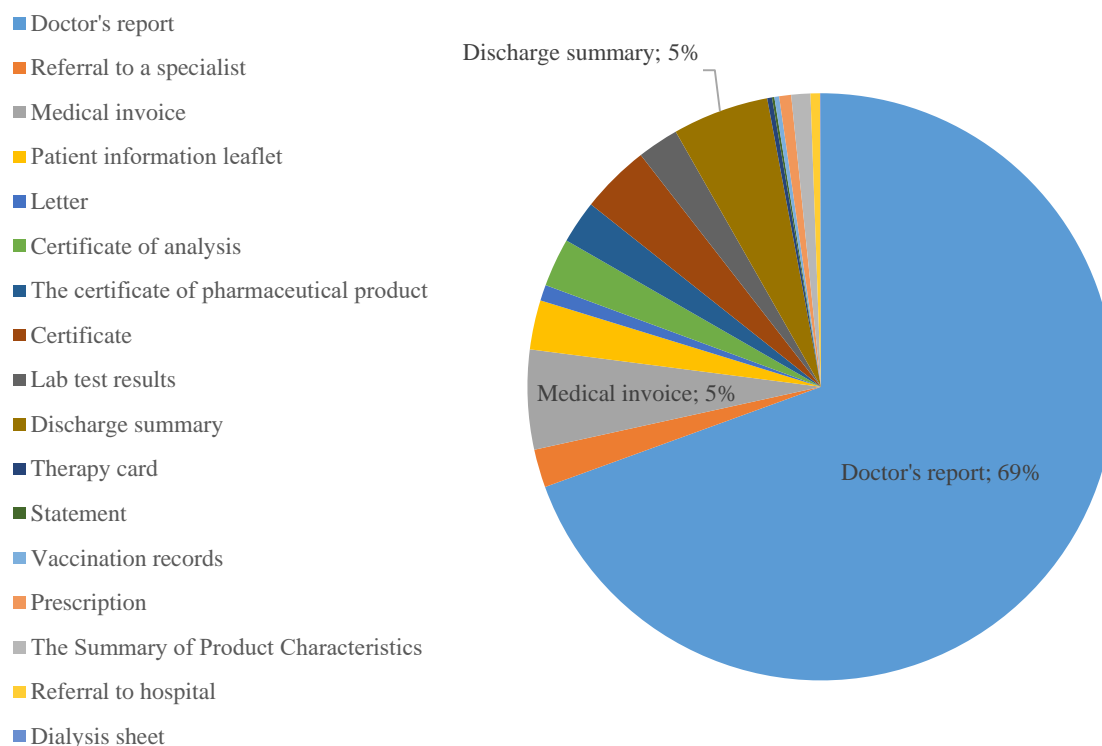
The translator/interpreter whose database we have analyzed for the purpose of the qualitative research has translated a total of 9.350 different documents since 2009, when he was appointed as a certified (court) translator/interpreter for the English language for the Federation of Bosnia and Herzegovina; 2.282 (24.41 %) have been different medical documents.

The medical documents are classified as follows,

Discharge summary “A clinical report prepared by a physician or other health professional at the conclusion of a hospital stay or series of treatments. It outlines the patient’s chief complaint, the diagnostic findings, the therapy administered and the patient’s response to it, and recommendations on discharge.” (*Thefreedictionary.com*, 2009)

Invoice	“A detailed list of ... services rendered, with an account of all costs; an itemized bill.” (<i>Thefreedictionary.com</i> , n.d.)
Lab test results	The results of “a procedure, usually conducted in a laboratory, that is intended to detect, identify, or quantify one or more significant substances, evaluate organ functions, or establish the nature of a condition or disease. Laboratory tests range from quite simple to extremely sophisticate. In modern medical practice they are commonly used to help establish or confirm a diagnosis and often aid in the management of disease.” (<i>Thefreedictionary.com</i> , n.d.)
Medical chart	“The terms medical record, health record, and medical chart are used somewhat interchangeably to describe the systematic documentation of a single patient’s medical history and care across time within one particular health care provider’s jurisdiction. The medical record includes a variety of types of “notes” entered over time by health care professionals, recording observations and administration of drugs and therapies, orders for the administration of drugs and therapies, test results, x-rays, reports, etc. The maintenance of complete and accurate medical records is a requirement of health care providers and is generally enforced as a licensing or certification prerequisite.” (“Medical record”, 2018)
Medical report	“A report of the results of a medical examination of a patient” (<i>Thefreedictionary.com</i> , n.d.)
PILs	“Patient information leaflets (PILs) are leaflets containing specific information about medical conditions, doses, side effects that are packed with medicines to give the user information about the product. PIL is the European version of the Package insert. The PIL is written by the manufacturing pharmaceutical company and is a patient friendly version of the Summary of Product Characteristics. All licensed medicines need to carry such a leaflet. There are guidelines that must be followed for producing this document, drawn up by the European Medicines Agency of the EU.” (“Patient information leaflet,” 2018)

- Prescription “A written directive, as for the compounding or dispensing and administration of drugs, or for other service to a particular patient.”
(*Thefreedictionary.com*, n.d.)
- Referral “In the nursing interventions classification, a nursing intervention defined as arrangement for services by another care provider or agency.”
(*Thefreedictionary.com*, n.d.)
- SPCs or the Summary of Product Characteristics “is a specific document required within the European Commission before any medicinal product or biocidal product is authorized for marketing. This document is required under a number of different European Regulations, e.g. Regulations concerning medicines and Regulations concerning biocidal products.” (“Summary of Product Characteristics,” 2018)
- Vaccination records “Vaccination records (sometimes called immunization records) provide a history of all the vaccines you or your child received. This record may be required for certain jobs, travel abroad, or school registration.” (“The Vaccination Records: Finding, Interpreting, and Recording,” 2016)



Over the last ten years, since the translator/interpreter was first appointed as a certified (court) translator/interpreter for the English language for the Federation of Bosnia and Herzegovina by the Federation of Bosnia and Herzegovina Minister of Justice, he has translated 2.282 different medical documents, issued by 117 different institutions in 15 different countries. The majority have been doctors' reports (1.585 or 69.46 %). The other most translated types of medical documents are hospital discharge summaries (5 %), as well as medical invoices (5 %).

Directionality

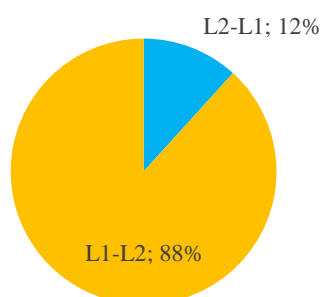


Figure 12 - Directionality in the translation of medical documents

DIRECTIONALITY		No
L1-L2	88.26%	2.014
L2-L1	11.74%	268
TOTAL		2.282

Table 12 - Directionality in the translation of medical documents

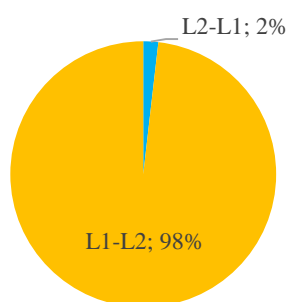


Figure 13 - Directionality in the translation of doctors'/specialists' reports

DIRECTIONALITY		No
L1-L2	98.04%	1.554
L2-L1	1.96%	31
TOTAL		1.585

Table 13 - Directionality in the translation of doctors'/specialists' reports

The directionality in the translation of medical documents is 88.26 % to 11.74 % in favor of L1- L2, and the directionality in the translation of physicians'/specialists' reports is 98.04 % to 1.96 % in favor of L1-L2, in other words in favor of Bosnian/Croatian/Serbian into English. There is a significant discrepancy between the two directionalities (in medical documents and doctors'/specialists' reports); it is due to the fact that a lot of PILs and SPCs have been translated from L2 into L1.

This seems to be opposite to the longtime common belief that professional translators should only translate into their first language.

Physicians'/specialists' reports by countries

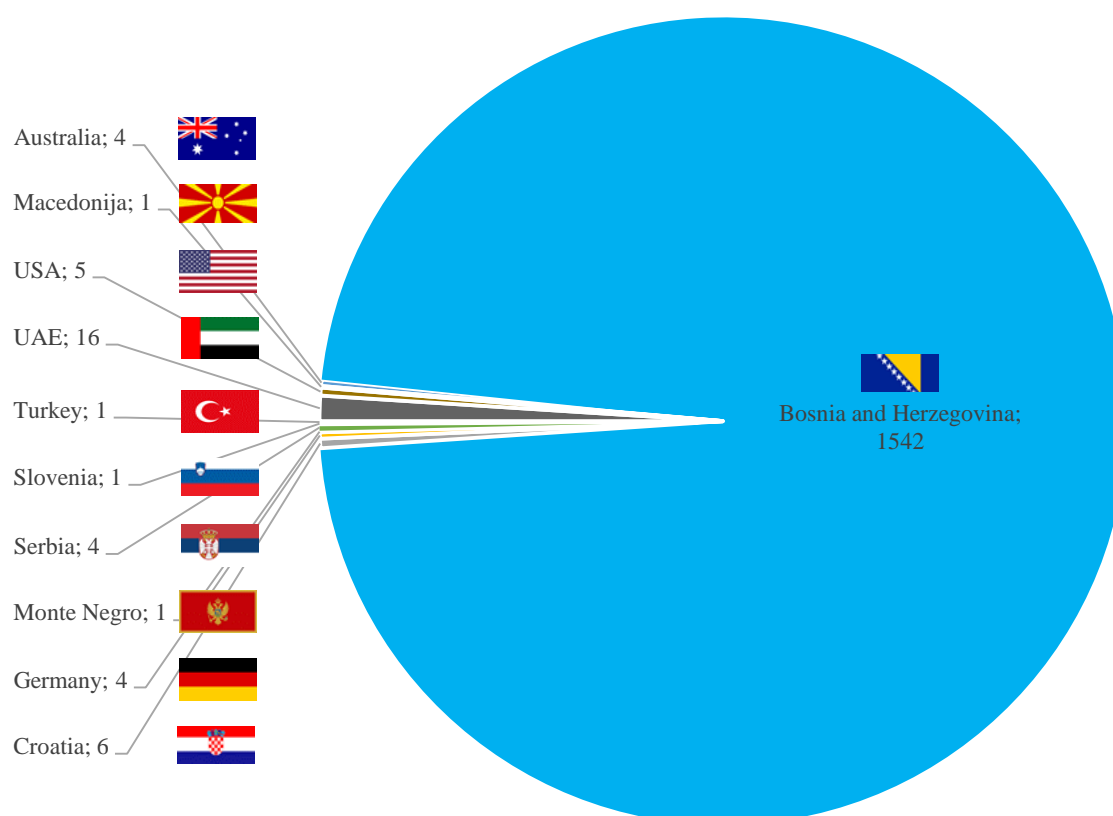


Figure 14 - Physicians'/specialists' reports by countries

The doctors'/specialists' reports (1.585 in total) have been issued by 91 different institutions, state or private, in eleven different countries (97.29 % in Bosnia and Herzegovina).

Physicians'/specialists' reports by health institutions

In this particular case, the majority of the doctors'/specialists' reports have been issued by physicians/specialists working at three health institutions - the Lukavac Health Center (50 %), the Tuzla University Clinic Center (18 %) and the private health institution called Plava poliklinika (Blue polyclinic) (10 %). One of the reasons most physicians'/specialists' reports have been issued by physicians/specialists working at the Lukavac Health Center in this case is that the translator/interpreter whose database we have studied lives in Lukavac, and his office is right next to the health center. Another reason for such a high demand for the translation of medical documents is the fact that a large number of people from Lukavac have been working

for American and international companies in Iraq, Afghanistan, Qatar, Georgia, Kuwait, and some other countries, providing support for U.S. Armed Forces for more than a decade. They need to have doctors'/specialists' reports translated if they have a health issue, and are sent home to undergo further medical treatment. After the treatment, they send the report(s) written by local doctors/specialists to their company's doctor, via email, who then decides whether they are 'fit for duty', which means that they may return to work. Another common requirements for translated doctors'/specialists' reports is when these employees request an LOA (leave of absence) to visit a family member who is ill or injured, to excuse their absence from work, or to request an extension to their leave of absence. There is one more reason, we have seen, for the rendition of doctors'/specialists' reports, and that is submission of supporting medical documentation to lodge a claim for compensation for a work-related injury, required by the worker's lawyers.

- Cottesloe Medical Centre
- Sir Charles Gairdner Hospital (SCGH)
- Specsavers Optometrics
- Australian Hearing
- Klinički centar Banja Luka
- ZU Stomatološka ambulanta Dr Majinović Bijeljina
- ZU Poliklinika Dr. Akšamić
- Specijalistička ambulanta fizikalne medicine i rehabilitacije Stanojlović
- ZU Specijalistički centar Dr Brkić
- ZU "Maksimović" - specijalistička ambulanta za mamografiju i ultrasonografiju
- Ginekološka ordinacija Dr. Švalić
- JZU Dom zdravlja Gračanica
- JZU Opća bolnica "dr. Mustafa Beganović" Gračanica
- Ordinacija opšte medicine Medicus-A Nizama Dr. Salihfendić Gačanica
- Privatna hirurška klinika Daffalla Gračanica
- Privatna ordinacija interne medicine Dr. Rizah Delić
- Stomatološka ordinacija Ajiša
- Stomatološka ordinacija Čatović
- Stomatološka ordinacija Dentamedic Gračanica
- Ginekološka ordinacija Džibrčić
- JZU Dom zdravlja Lukavac
- Osteomedic
- PZU Oftalmološka ordinacija "Visus" Lukavac
- PZU Poliklinika Amili Lukavac
- Stomatološka ordinacija "Karić Dr. Alija" Lukavac
- Stomatološka ordinacija Dr. Kurtić
- Stomatološka ordinacija Salibašić
- BiH (Bohemijski-Imunološki-Hematološki) Medicinski Laboratorij Ilidža
- Institut za patologiju Medicinskog fakulteta Sarajevo
- Neuropsihijatrijska Ordinacija Kantardžić Sarajevo
- PZU Eurofarm Centar Poliklinika Sarajevo
- PZU Poliklinika "Al-Tawil"
- Stomatološka ordinacija Dr. Sandra Bizović
- Zavod za transfuzijsku medicinu Federacije Bosne i Hercegovine
- ZU Specijalistički centar "PAROVIĆ" Teslić
- ZU Opća bolnica Tešanj
- Centar za srce BH Tuzla
- Centru za plastičnu hirurgiju Berberović
- Dermatološko kozmetički centar "Farah"
- Ginekološka ordinacija "Omeragić"
- Ginekološka ordinacija Hajder IPRV
- Ginekološka ordinacija "Viva intima" Tuzla
- Ginekološka ordinacija Dr. Blitvić
- Ginekološka ordinacija Dr. Balić
- Ginekološka akušerska ordinacija Dr. Zulčić IPRV
- IQ & EQ Agencija za unapređenje zdravih uslova života i relaksaciju
- JZNU Dom zdravlja "Dr. Mustafa Šehović" Tuzla
- Ordinacija opće medicine Medica Dr. Antić Štauber BrankaTuzla
- Ordinacija oralne hirurgije i opšte stomatologije Prodentia
- Poliklinika Life m
- Privatna praksa iz medicinske psihologije "AJNA",Tuzla
- Privatna stomatološka poliklinika "Huskanović"
- Privatni biohemijski laboratoriji ExtraLab
- PZU Ginekološka poliklinika Korak do života Tuzla
- PZU Poliklinika "Medical Irac"
- PZU Poliklinika Mediscan Tuzla
- Radiološka ordinacija Prim. Dr. med. Amila Halilčević
- Stomatološka ordinacija Alabajči
- Stomatološka ordinacija Novodent Tuzla
- Stomatološka ordinacija Trešnje
- Stomatološka ordinacija "Estetska stomatologija Čeperković"
- UKC Tuzla
- ZU Plava poliklinika
- ZU Poliklinika Azabagić
- Zuba Ordinacija Šabić, Tuzla
- Zuba ordinacija Selimović Dr. Zuhdija Selimović Tuzla
- Kantonalna bolnica Zenica
- JZU Dom zdravlja Živinice
- Ordinacija opšte medicine Dr. Husnija Majdančić, Živinice
- Ordinacija zaginekologiju i perinatologiju "Dr Kavgić" IPRV
- Das Deutsche Herzzentrum Berlin
- The Landstuhl Regional Medical Center
- JZU Opšta Bolnica Berane
- Poliklinika za estetske operacije i plastičnu kirurgiju lica i tijela Dr. Branko Glušac, Makarska
- Specijalna bolnica za medicinsku rehabilitaciju Biokovka, Makarska
- Specijalna bolnica za ortopediju i opću kirurgiju "DR. NEMEC", Matulji, Opatija
- Klinički bolnički centar Zagreb (KBC)
- Poliklinika Neuron, Zagreb
- Poliklinika za otorinolaringologiju, anesteziologiju i kirurgiju Orlando
- PZU Specijalistička bolnica za ginekologiju i materinstvo Sveti Lazar
- Oculus Specijalna bolnica za oftalmologiju
- Poliklinika Dia Lab
- Specijalna bolnica Sveti Vid
- Onkološki inštitut Ljubljana
- Memorial Hospitals
- Burjeel Hospital
- Canadian Specialist Hospital
- Medsol Diagnostic
- Dr. Richard Glassman
- Brian D. Lambden, MD. Physical Medicine & Rehabilitation, Pain Management
- Gwinnett Clinic

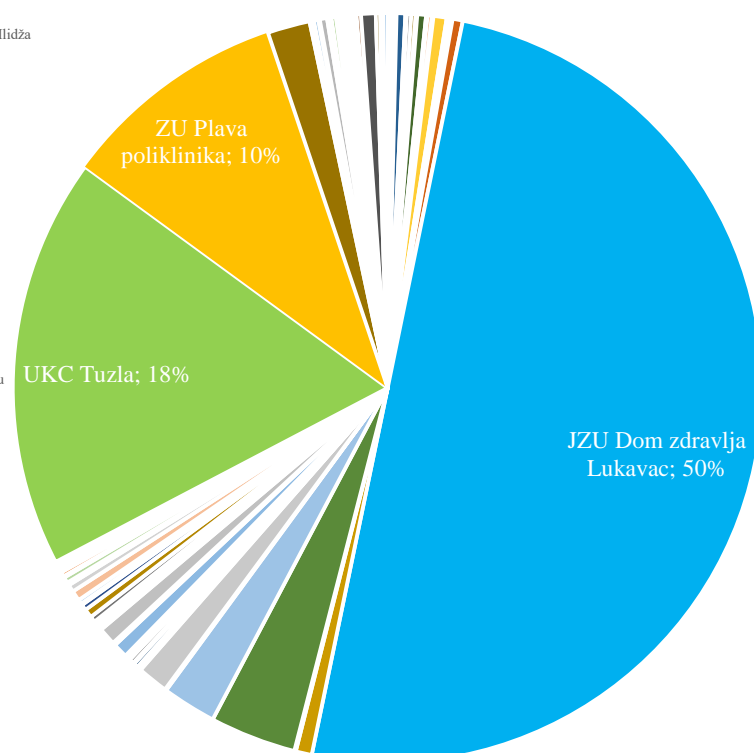


Figure 15 - Physicians'/specialists' reports by health institutions

The doctors'/specialists' reports have been issued by the following divisions of the Lukavac Health Center:

The Division of Dental Health Care,
The Division of Diagnostic Radiology,
The Division of Emergency Medicine,
The Division of Family Practice,
The Division of General Internal Medicine,
The Division of Hygiene Epidemiology,
The Division of Lung Diseases
The Division of Microbiology and Parasitology
The Division of Occupational Medicine,
The Division of Ophthalmology,
The Division of Otorhinolaryngology,
The Division of Physical Medicine and Rehabilitation,
The Division of Skin and Venereal Diseases,
The Division of Women's Health Care - The Division of Obstetrics and Gynecology
The Mental Health Center

The average number of words per doctor's/specialist's report issued by the Lukavac Health Center's Divisions

We have decided to establish the average number of words per doctor's/specialist's report by analyzing the reports issued by the Lukavac Health Center as the reports have been issued by a large number of divisions. The average number of words per doctor's/specialist's report is 140. We have established the number by dividing the total number of words in all the reports by the total number of the reports. As it can be seen, some divisions tend to make more extensive reports; in our case the top two are the reports issued by the mental health center (257 words) and the division of diagnostic radiology (179 words).

This confirms that these texts are as clear and concise as possible due to the facts discussed in the Literature review section. The doctors'/specialists' reports being analyzed for the purpose of this paper have been issued by primary and secondary care physicians/specialists. Reports issued by tertiary care specialists, the ones working at hospitals, may be slightly longer; but this research has not studied them.

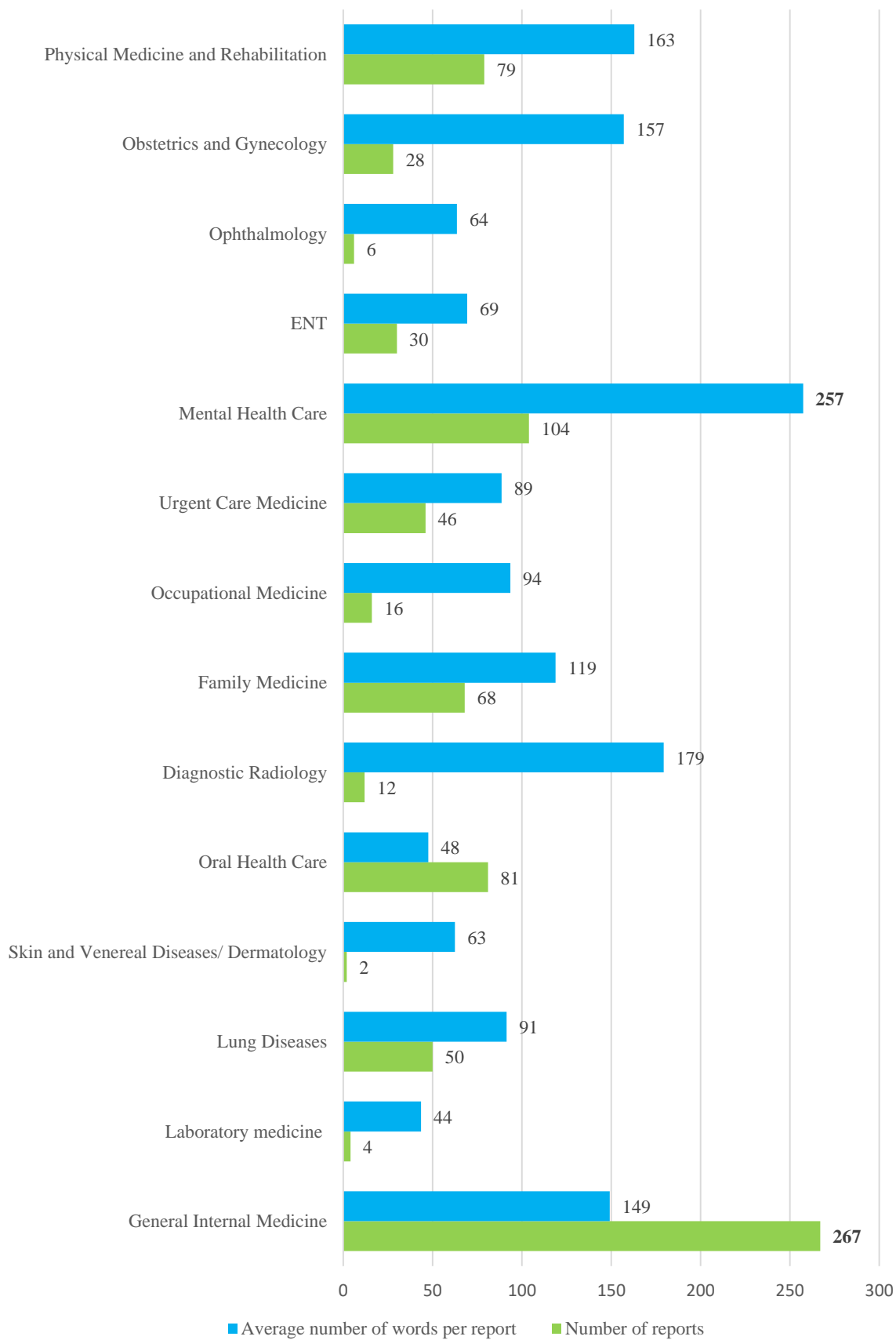


Figure 16 - The average number of words per doctor's/specialist's report issued by the Lukavac Health Center's Divisions

DIVISION AT THE LUKAVAC HEALTH CENTER	Total number of words	Number of reports	Average number of words per
General Internal Medicine	39,833	267	149
Laboratory medicine	174	4	44
Lung Diseases	4,573	50	91
Skin and Venereal Diseases/ Dermatology	125	2	63
Oral Health Care	3,854	81	48
Diagnostic Radiology	2,152	12	179
Family Medicine	8,084	68	119
Occupational Medicine	1,496	16	94
Urgent Care Medicine	4,074	46	89
Mental Health Care	26,770	104	257
ENT	2,083	30	69
Ophthalmology	382	6	64
Obstetrics and Gynecology	4,398	28	157
Physical Medicine and Rehabilitation	12,866	79	163
	110,864	793	140

Table 14 - The average number of words per doctor's/specialist's report issued by the Lukavac Health Center's Divisions

In order to explain how we have calculated the average number of words, we have used the following, randomly chosen, report as an example. We have counted only the words the physician/specialist had written/typed into the form (the highlighted text). In this particular case, the report has 78 words. Even being almost twice as short as the average physician's/specialist's report issued by physicians/specialists at the Lukavac Health Center, it still fulfils the SOAP format requirements.

.....
 (The name of the health institution)

Outpatient's number

SPECIALIST'S FINDING AND OPINION (*specialist's report*)

The examination has been done and the following finding and opinion regarding the diagnosis, further treatment and the evaluation of the fitness for duty of the ~~above~~ named is being submitted:

Mr. XXXXX (*father's name* XXXX) XXXX (Y.O.B.) 1984

Today, May 30, 2018, the patient has come for a checkup because of problems

manifested as hoarseness (loss of voice), cough and pain in the larynx.

Diagnoses: Acute laryngitis and pharyngitis

Treatment/Therapy: Amoklavin bid tablet (Amoxicillin + Clavulanic Acid)

Film Coated, 1000 mg - two a day

GeloMyrtol - three a day

Lab test results: WBC 13.5

(Increased) - indicates the presence of inflammation

The follow up visit within 5 days

Lukavac May 30, 8
 In Date, 201 ...
 (A round stamp)

The specialist physician
 (Signature and a rectangular stamp)

To see whether the doctors'/specialists' reports issued by the physicians/specialists at the Lukavac Health Center are different in length from the reports issued by other health centers, we have compared them, with regard to the number of words (the length), with the reports issued by some other health centers from the neighboring municipalities in the Tuzla canton, which the translator/interpreter whose database we have used had translated.

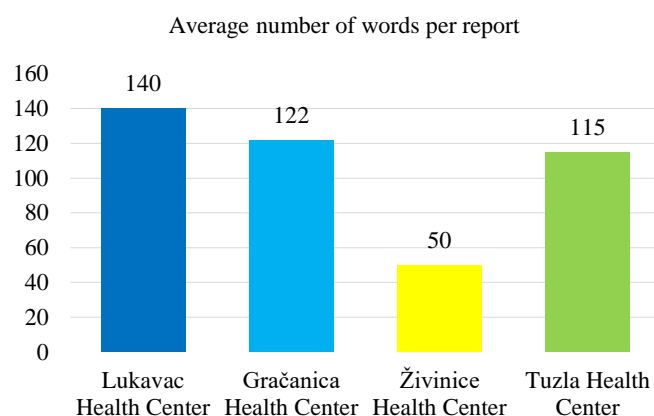


Figure 17 - The average number of words per a report - comparison with other health centers

Health Center	Total number of reports	Average number of words per a report
Lukavac	793	140
Gračanica	6	122
Živinice	1	50
Tuzla	5	115

Table 15 - The average number of words per a report - comparison with other health centers

It is found that, as shown in Figure 17 and Table 15 above, the average numbers of words in the physicians'/specialists' reports issued by doctors/specialists working at the three health centers in the neighboring municipalities are even smaller. Confirming the belief that these documents are generally short, having less than 150 words.

Common errors seen in doctors'/specialists' reports

A lot of doctors/specialists write their reports quickly, not paying too much attention to the way they fill in information. A common mistake made by doctors/specialists is writing a patient's first name where the form says should be his/her last name and vice versa (see Appendix 5).

We, the source language (SL) readers, do not see this as a problem; but it may cause a problem for a target language (TL) reader if the information is input to a database, and if one later tries to find the person by his/her last name typing his/her first name. Although, the source readers usually have no problems differentiating the two, even the source readers cannot always be sure what a person's first or last name is in the reports made locally (e.g. Oto Muha / Muha Oto). Are we always able to distinguish between foreign first and last names? In the same Appendix, you can see another mistake. The form requires date of issue twice, obviously it is a mistake in the form, but such mistakes are usually left uncorrected. In this case, the physician/specialist wrote the patient's year of birth where the first date of issue was required (e.g. 'Date of issue: 1998'), and the date of issue where the second date of issue was required. Doctors/physicians also rarely use titles (Mr., Mrs., Ms. and Miss) before last names or full names. The source readers are accustomed to local names, and they can say with certainty by seeing someone's first name if the person is a woman or a man; but is the target reader able to do it? That is the case in this report, too. As you can see in Appendix 5, these three mistakes (title, first and last name order, and the error in the form) are corrected by the translator/interpreter. There are ambiguities in other reports, too. Doctors/specialists, as well as patients, are used to seeing them and do not pay attention to what they actually say. Another such example is a standard form (one page - A5 paper) used by doctors/specialists at the Lukavac Health Center (see Appendix 6). It can confuse someone who is not acquainted with the form of the report and reads it carefully. The following sentence on page 2 (overleaf, the pages are not numbered) is problematic: "The examination has been done and the following finding and opinion regarding the diagnosis, further treatment and the evaluation of the fitness for duty of the above named is being submitted." The ambiguity is created by the phrase "the above named" and the fact that no name is ever mentioned above in this form. Doctors/specialists always write the patient's name below. As it can be seen in the following example, the first page is not usually filled in. The patient's name could only be mentioned overleaf (which is usually not the case), but not above. The translator whose database we have used for the qualitative research has always crossed out the phrase to avoid the ambiguity.

Recommended steps for certified translators for translation of doctors'/specialists' reports

The process of translation is individual and it depends on a translator's preferences. However, based on their experience with translating doctors'/specialists' reports, the authors recommend the following steps a certified translator may follow until s/he does not find the ones that better suit her/him. If you are able, have time and are comfortable with the text type, to translate the text a client has brought, do the following:

1. Take contact number (information) from the client, and tell her/him that you will contact her/him when the translation is over. Tell the client the amount you will charge, or approximate amount if you are not sure, and approximate amount of time you need to translate the document. It is advisable to make a database of regular clients, so you do not ask them for their phone number (contact information) every time. It will make you look more professional.
2. Prior to translation, skim the report for unknown words.
3. Look up the unknown words (Google, look up in a medical dictionary, etc.).
4. Read the report to get the grasp of the text.
5. Translate the report sentence by sentence, paying attention to the word order, tense, vocabulary, collocations, register, etc.
6. Go the extra mile and add images from the source text, if possible, adjust the font and layout to make the target text look as similar to the source text as possible. It can be time-consuming, but it contributes to better, more professional look of the final product.
7. Run spell check and proof read the report?
8. Print, sign and stamp.
9. Check the number of words (*word count* option in Microsoft Word) and calculate the amount to be charged; then make the receipt.
10. Write in the information on the translation in the register of translations (the number of the translation, the date, the information on the client, the description of the document, whether the translation is going to be used in the country or abroad, the way of payment, and the amount charged).
12. Contact the client to let her/him know s/he may collect the translation.

Do not forget to be polite, patient, and professional at all times, as “The customer is always right”, right?

CONCLUSION

Translation of medical register, particularly doctors'/specialists' reports, is common in the practice of certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina; although almost none of them has been institutionally or formally trained to translate them, let alone specialized in medical translation. Therefore, a study is conducted to describe the doctor's/specialist's report, as the most commonly translated type of medical documents, from translators'/interpreters' point of view.

A lot has been said about challenges of translating doctors'/specialists' reports in literature and online sources; however, this thesis also provides the results of a comprehensive study of this phenomenon relying on the experience and data collected from certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina.

The aim of this paper is to give translation of doctors'/specialists' reports 101, in other words to provide an insight into translation of this type of text to those who have not had a chance to translate it.

Why do patients need doctors'/specialists' reports translated? In our case, as proven by the qualitative research, those who work abroad for international companies need them if they have a health issue, and are sent home to undergo further medical treatment, so local doctors may see what the problem is and why they are referred to see them. After the treatment, they send the report(s) written by local doctors/specialists to their company's doctor, mostly via email, who then decides whether they are 'fit for duty', which means that they may return to work. Another common requirement for translated doctors'/specialists' reports is when these employees request an LOA (leave of absence) to visit a family member who is ill or injured, to excuse their absence from work, or to request an extension to their leave of absence. There is one more reason for the rendition of doctors'/specialists' reports, and that is submission of supporting medical documentation to lodge a claim for compensation for a work-related injury, required by the worker's lawyers.

Triangulation method has been used, combining the results of the quantitative and qualitative research, to test the paper's hypotheses. The primary hypothesis is that physicians'/specialists' reports are regularly translated documents by certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina. The first secondary hypothesis is that physicians'/specialists' reports share certain characteristics, which, with regard to their

translation, present certain advantages and disadvantages over translation of other types of texts. The second secondary hypothesis is that certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina do not receive any formal training in medical translation. The third secondary hypothesis is that the biggest problem for the certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina with translation of physicians'/specialists' reports is posed by abbreviations used in the reports. The paper provides a useful list of the abbreviations commonly used by doctors/specialists working at the Lukavac Health Center (see Appendix 10).

The results of the survey conducted on random sample of 65 certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina show that, by and large, translators/interpreters for the English language for the Federation of Bosnia and Herzegovina translate medical documents and doctors'/specialists' reports on a regular basis. However, for the majority of the respondents these documents are not the most commonly translated types of texts. The directionality is largely in favor of L1 into L2.

With regard to the advantages and disadvantages of translating doctors'/specialists' reports, majority is undecided about which prevail; yet more respondents believe that there are more disadvantages. It has been established that the biggest advantage of translating this type of text is the fact that a lot of words and phrases, used for diagnoses, symptoms, diseases, specialists, diagnostic tests, surgical procedures, treatment, etc., are used repeatedly. Another big advantage is the use of natural borrowings, which make a large number of medical terms in English almost the same in Bosnian/Croatian/Serbian, e.g. fracture - *fraktura*, an internist - *internista*, therapy - *terapija*, treatment - *tretman*, etc. A certain number of respondents also believe that the length of these texts, less than 150 words, is yet another advantage. According to the comments made by some of the respondents, the internet and simple structure facilitates translation of these documents, too. Goldsmith (2015) says she uses CAT tools, such as SDL Trados Studio, which enormously help translators by, among other things, allowing them to build up customized glossaries, including abbreviations, so they are on hand when needed. Unfortunately, the translators/interpreters for the English language for the Federation of Bosnia and Herzegovina mostly do not utilize this effective tool. What also makes translation of doctors'/specialists' reports easier than translation of literary texts or newspaper articles is the fact that they, generally speaking, do not use idioms. There are some fixed expressions, though.

The thesis demonstrates that the main disadvantage of translating doctors'/specialists' reports is the use of abbreviations, which may be in Latin, English, or Bosnian/Croatian/Serbian, and translators/interpreters usually do not know in which language they are, as they normally appear

in all three. For some reason, some doctors/specialists in the Federation of Bosnia and Herzegovina, mostly in local health centers, still handwrite their reports; therefore, another thing that makes translation of these texts difficult is doctors' handwriting. Almost one third of the respondents share this opinion. Marissa Laliberte (2018), an author at Reader's Digest, says in her article "Bad handwriting almost seems like a requirement for graduating med school". Significant percentage of the respondents does not know the subject matter and the medical register. One respondent mentions empathy, yet another disadvantage, saying she cannot charge such translations and does them for free to have a clean conscience.

Doctors'/specialists' reports seem to be similar all over the world by their structure, layout and content. They are usually one-page documents on a health institution's letterhead (see Appendix 8). Making the translation look like the source text is time-consuming, but some translators/interpreters do it nevertheless by adjusting the layout, font, even inserting logos and other images (see Appendix 4). Being pressed for time, doctors/specialists usually write their reports quickly, not paying enough attention to the way they fill in information in the forms. With regard to this, common, maybe benign, errors made by doctors/specialists are writing a patient's first name where the form requires her/his last name, and vice versa. For source readers this is not a problem, as they easily differentiate between the two, but it may cause a problem if the information is input to a database in a foreign country and if a target reader later tries to find the person by her/his last name typing her/his first name. Doctors/physicians in the Federation of Bosnia and Herzegovina rarely use titles (Mr., Mrs., Ms., and Miss) before last names or full names, which may create ambiguity for target readers. According to Baker (1992), "In English, for instance, a common and acceptable form of address in a formal context such as a business letter consists of title plus surname, for example *Mr Brown, Mrs Keith, Dr Kelly.*" There are frequent examples of incorrect use of punctuation by doctors/specialists. For example, in the report in Appendix 5, it is seen that the doctor has put a full stop where it should not be, confusing the translator/interpreter. The word '*Infekcije*' (meaning *infections*) in the source text stands on its own separated from the rest of the text with full stops. It creates ambiguity to a non-medical professional who reads the text, as the solitary word does not make sense nor does it make a sentence, there is no a verb, not even an implied one. Actually, as it is seen in the image of an online search (Appendix 5), the word should not have been separated from the previous sentence, as it is a part of the 'primary varicella-zoster virus (VZV) infection' phrase. It takes a translator/interpreter time to realize that. Therefore, translation seems to involve some deciphering, too. The paper shows that these common errors are corrected by translators/interpreters (see Appendix 5). The forms used by doctors/specialists to write their

reports often contain errors, that source readers, including local health professionals and patients, are used to and do not pay attention to them; however, they may be confusing to target readers if left uncorrected, and as shown in the paper, translators tend to correct them (see Appendix 5 and Appendix 6).

As mentioned above, these documents are short. The average number of words per a doctors'/specialists' report issued by doctors/specialists working at the Lukavac Health Center is 140. The number may seem low, but one has to bear in mind the fact that doctors/specialists see dozens of patients a day and they have to write concisely, following Grice's maxims, knowingly or unknowingly, applying the SOAP format. It has also been seen that some divisions of the Lukavac Health Center tend to issue longer reports compared to others. That is because some diseases are easier to diagnose, requiring less diagnostic tests, time and medications, the treatment is more straightforward and it can be explained in a sentence or two. With regard to the text type and function, doctors'/specialists' reports comprise several main text characteristics, as summarized by Reiss (1977/89). They are primarily informative, in a way that they provide facts and information, either to a patient, another health professional, or the physician/specialist, as they always need them in case of a follow-up. For such texts, Katharina Reiss (1976) (as paraphrased in Munday, 2016) suggests translators transferring the entire source text's 'referential and conceptual content'. These documents are also operative, indicating patients or other physicians what needs to be done in the course of further treatment. Some of them are audio medial, including images made by X-ray, MRI or CT (see Appendix 8). Lastly, they rarely, if ever, demonstrate expressive function. That may be seen in the subjective (S) part of a report in which physicians/specialists write down/type patients' account of an accident or injury. They are also logical, to those who understand the subject matter. The recommended translation method for such texts, as explained by Reiss (1971 in Munday 2001: 74) is 'plain prose', meaning that translators should avoid verbosity and transfer the text explicitly without worrying about style; in other words, just transmit the facts and terminology. The events in the doctors'/specialists' reports are orderly, normally described in the order in which they occurred, which helps to give them cohesion¹⁰ and coherence. Although, Baker (1992) does not mention the maxim 'Be orderly' in her book to specifically talk about any type of text, it certainly applies to doctors'/specialists' reports. She says, "Temporal order may be a widespread or universal ordering strategy."

¹⁰ The network of lexical, grammatical, and other relations which provide formal links between various parts of a text. (Baker, 1992)

The coherence of these texts, in other words the ability to make sense of their content, depends on the reader's knowledge of the subject matter, in this case medicine.

The most common, if not the only, equivalence-related problem with regard to these documents is created by lack of equivalence at word level, rather than above word-level. This is usually the case with new words for diagnostic tests and equipment.

Grammatical equivalence does not pose a problem, as grammatical categories of number, gender, person, tense and voice are not that different between the source language and the target language in the case of the two languages, English and B/C/S, as it is the case with some other languages.

To reiterate, in the Federation of Bosnia and Herzegovina, official translation is done by certified (court) interpreters who are appointed by the Federal Minister of Justice. Although appointed as court interpreters, they are expected to translate all kinds of documents or registers. This is not the case in other, especially western, countries, where translators specialize in certain fields. Racoma (2017) says, "Being a medical translator is highly specialized. It's for this reason that many translators do not dare go into this field." Doctors'/specialists' reports are just one of many text types that certified translators/interpreters for the English language for the Federation of Bosnia and Herzegovina translate. Some translate them almost on a daily basis; some have never had a chance to translate them.

Undoubtedly, these texts, as well as any other, pose certain challenges to translators/interpreters and have their own peculiarities that present advantages and disadvantages for translators/interpreters.

Although different methodology has been used to collect and interpret the research data, its results are limited or restricted in the way that the quantitative research has been conducted on a geographically small area, the Federation of Bosnia and Herzegovina, and the fact that the qualitative research has studied just one translator's/interpreter's translation database.

Notwithstanding the foregoing, this paper may be used for the introduction of translation of medical register, and doctors'/specialists' reports in particular, to undergraduate English language students or to translation students at Master's program, future translators/interpreters, as this type of text is unjustifiably left out from the undergraduate English language curriculum, which will hopefully change. This paper cannot and does not teach everything about medical translation; to remind, it is medical translation 101. With regard to the field of medical translation, it is *a drop in the ocean*; however, we believe that those who have no experience in medical translation may get the taste of its 'bitterness'.

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Appendix 2 - The informed consent statement

Saglasnost za učešće u istraživanju

Poštovani!

Ja sam Dean Ibrahimagić, student drugog ciklusa studija na Filozofskom fakultetu u Tuzli, Odsjek za Engleski jezik i književnost, smjer Prevođenje engleskog jezika. Za izradu mog magistarskog rada čija je tema Prevođenje medicinskog registra - prednosti i nedostaci prevođenja liječničkih/specijalističkih nalaza, provodim istraživanje kojim se nastoji ispitati hipoteze da su liječnički/specijalistički nalazi jedna od najčešće prevođenih vrsta dokumenata u praksi sudskih tumača u Federaciji Bosne i Hercegovine, da je smjer prevođenja u najvećem broju slučajeva L1-L2, te da tumači i prevoditelji ne stječu iskustvo prevođenja liječničkih/specijalističkih dokumenata u toku formalnog dodiplomskog obrazovanja.

Molimo vas da pažljivo pročitate pitanja iz upitnika koji vam šaljem u prilogu, te da označite odgovore koji najpreciznije opisuju vaš stav. Vašim odgovorima pomoći ćete u dobijanju preciznijih rezultata istraživanja. Za popunjavanje ankete potrebno je nekoliko minuta.

Popunjavanjem upitnika iz priloga dajete svoj pristanak da te podatke koristim i objavim u svom istraživanju. Vaši lični podaci (vaše ime i prezime), broj vašeg telefona/mobitela, kao i vaša adresa elektronske pošte neće se koristiti niti navoditi u ovom radu, a vaša anonimnost je potpuno zagarantirana.

Hvala za učešće i srdačan pozdrav,

Dean Ibrahimagić

*Appendix 3 - Survey questions***MonkeySurvey***Translation of doctors'/specialists' reports*

1 I am a certified interpreter/translator.

Yes

No

2. I translate medical documents on a regular basis.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

3. I translate doctors'/specialists' reports on a regular basis.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

4. Doctors'/specialists' reports are one of the most commonly translated types of documents.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

5. I mostly translate doctors'/specialists' reports from L1 into L2.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

6. Translation of doctors'/specialists' reports has more advantages than disadvantages?

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

7. State the biggest advantage

They are short (less than 150 words)

The same phrases (for diagnoses, symptoms, diseases, specialists, diagnostic tests, surgical procedures, treatment, etc.) are used repeatedly

A lot of medical terminology in English is almost the same as in

Bosnian/Croatian/Serbian (a fracture - *fraktura*, an internist - *internista*, therapy - *terapija*, treatment - *tretman*, anamnesis - *anamneza*, etc.)

Other (*please specify*) _____

8. State the biggest disadvantage

I do not understand the matter (I am not a medical professional)

Doctors' handwriting is illegible

There are a lot of abbreviations (and we are not even sure if they are in English, Latin or Bosnian/Croatian/Serbian)

The medical register (language style)

Other (*please specify*) _____

9. I had received formal training (at the undergraduate study) to translate medical documents - doctors'/specialists' reports before I was appointed as a certified interpreter/translator?

Yes

No

10. If the answer to Q 9 was 'Yes', the training had been adequate.

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

My answer to Q10 is 'No'; therefore, I will skip this question.

Thank you very much for participating in the poll.

Appendix 4 - Visual similarity between the source text and the target text (translation)

The source text


Laboratorijski izvještaj
EUROFARM CENTAR LABORATORIJA

Prezime i ime pacijenta: Sakić Adi (1998)
 Spol: M
 Naručilac: Eurofarm Centar Poliklinika-CL
 Broj protokola: TORCH/RB24-CL
 Datum uzimanja uzorka: 27.12.17
 Datum izrade nalaza: 28.12.17

Analiza: RUBELLA ELISA IgG/IgM

Rezultat:

Rubella		Interpretacija	Ref. vrijednosti
IgG	20,1	pozitivan	neg. <9, equivoc. 9-11, poz. >11

Rezultat ovog testa pokazuje da je pacijent priio MMR (measels, mumps, rubella) vakcinu Razmatranje rezultata ovog testa zajedno sa rezultatima ostalih kliničkih pretraga može pomoći u daljnim kliničkim odlukama za ovog pacijenta.

Upozorenje: Rezultate testiranja treba tumačiti u kontekstu sa kliničkim nalazom, uzorkovanjem biološkog materijala i drugim laboratorijskim podacima. Ako se dobijeni rezultati ne podudaraju sa rezultatima drugih kliničkih i laboratorijskih nalaza, molimo da kontaktirate stručno osoblje Eurofarm Centralne Laboratorije za moguće ponovno tumačenje.

Metoda: RUBELLA ELISA IgG/IgM Vircell. Test je interno validiran i radi se uz kontrole analize.

Tea Bećirević, magistar genetike

Doc.dr. Daria Ter, molekularni biolog



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 71210 Ilidža BiH
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www.eurofarmcentar.ba

ZiraatBank BH d.d.
 186 000 100 76450 45
 UniCredit Bank dd Mostar
 338 900 220 88867 26
 S.W.I.F.T. CODE: UNCRBA22
 IBAN: BA393 3891048013517
 Acc. No: 20001897001 EUR

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 Ul: Ozrakovići bb,
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PZU EUROFARM CENTAR POLIKLINIKA GORAŽDE Podružnica Goražde
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The target text (translation)



EUROFARMCENTAR
PRIVATNA ZDRAVSTVENA USTANOVA

The Lab Test Report
THE EUROFARM CENTAR LABORATORY

The last and first name of the patient: Sakić Adi (Y.O.B 1998)

Sex: M

Requested by: Eurofarm Centar Poliklinika-CL

Protocol number: TORCH/RB24-CL

Sampling date: December 27, 2017

The date of the report: December 28, 2017

Analysis: Screening for rubella IgG and IgM using an ELISA test

The result:

Rubella	Interpretation	Reference values
IgG	20.1	positive
		negative <9, equivocal 9-11, positive >11

The result of the test shows that the patient had received MMR (Measles, mumps, and rubella) vaccine. The analysis of the results of the test as well as other clinical test results may help make future clinical decisions with regard to this patient.

Note: The results of the test should be interpreted in the context of the clinical findings, sampling of the biological material and other laboratory data. If the obtained results do not match with the results of other clinical findings and laboratory tests, please contact the Eurofarm professional staff at the Central Laboratory for possible reinterpretation of the results.

The method: VIRCELL RUBELLA IgG and IgM using an ELISA test. The test has been internally validated and it is performed along with the control analyses.



EUROFARM CENTAR,
PZU (A Private Health Institution)
POLIKLINIKA (policlinic), SARAJEVO
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(A round stamp)
(An illegible signature)

Tea Bećirević, MSc degree in genetics

Doc.dr. Daria Ler, a molecular biologist

The interpreter's note:

I, Dean Ibrahimagić - a high school English teacher and a permanent certified Bosnian to English court interpreter, confirm that this translation totally suits the original in Bosnian.

In the document, there is a round stamp with the following text in Latin letters:

- A Private Health Institution - Sarajevo
- "Eurofarm-Centar Poliklinika" (The Eurofarm Center Poliklinic) 2
- The logo of the poliklinic in the center of the stamp



The target text

Biochemistry
 Clinical Immunology Laboratory
 Hematology Tel. / Fax 00387 33 62 83 02; 20 83 48
 Cell phone number: 00387 61 55 27 01

First and last name: **Mr. ADI SAKIĆ**

Date of issue (Y.O.B.): 1998

Date of issue: December 30, 2017

Type of analysis	The result	Normal values
VARICELLA-ZOSTER VIRUS		
IgG ELISA	779.3 !!!	< 50 m IU/ml

INTERPRETATION

V.a. passive infection with varicella-zoster virus (VZV). Immunity from primary VZV infection. In individual cases, at the onset of a primary VZV infection, there are only high levels of IgM antibodies, whereas the increase of IgM antibodies occurs later. Therefore, in case of reasonable clinical uncertainty, it is recommended to repeat the laboratory test, as well as IgM-class antibodies to VZV.

The result has been verified by:
 Dr. sci. Lejla Hasanbegović, a medical laboratory diagnostics engineer

(A rectangular stamp)
 (An illegible signature)

The interpreter's note:

I, Dean Ibrahimagić - a high school English teacher and a permanent certified Bosnian to English court interpreter confirm that this translation totally suits the original in Bosnian.

In the document, there is a rectangular stamp with the following text in Latin letters:

- Dr. sc. Lejla Hasanbegović,
- a medical laboratory diagnostics engineer

Lukavac, January 15, 2018



The screenshot shows a web browser window with three tabs: Google, Yahoo, and 'Immunity from primary VZV infection'. The address bar contains the search URL: <https://www.google.ba/search?hl=hr&ei=OyhMW4vRIq-NmgW78IPoAQ&q=Immunity+from+primary>. The search bar contains the text 'Immunity from primary VZV infection'. Below the search bar are navigation options: 'Sve', 'Slike', 'Videozapisi', 'Karte', 'Više', 'Postavke', and 'Alati'. The search results are displayed below, showing approximately 206,000 results found in 0.20 seconds.

Humoral and Cellular Immunity to Varicella-Zoster Virus: An Overview ...
https://academic.oup.com/jid/article/197/Supplement_2/.../848608 - Prevedi ovu stranicu
 autor: AM Arvin - 2008 - Spominje se 101 puta - Srodni članci
 1. ožu 2008. - Under conditions of naturally acquired **primary varicella-zoster virus (VZV) infection**, the first response of the naive host is mediated by the ...
 Innate Immunity · Memory Immunity · Vaccine Immunity

Early immune response in healthy and immunocompromised subjects ...
<https://www.ncbi.nlm.nih.gov/pubmed/3016110> ▾ Prevedi ovu stranicu
 autor: AM Arvin - 1986 - Spominje se 161 puta - Srodni članci
 Events in pathogenesis and **immunity** during **primary varicella-zoster virus (VZV) infection** were examined in 64 healthy subjects and 21 immunocompromised ...

VZV T cell-mediated immunity. - NCBI
<https://www.ncbi.nlm.nih.gov/pubmed/20473790> ▾ Prevedi ovu stranicu
 autor: A Weinberg - 2010 - Spominje se 90 puta - Srodni članci
Primary varicella-zoster virus (VZV) infection (varicella) induces **VZV**-specific antibody and ... T cell-mediated **immunity**, which is detected within 1-2 weeks after ...

Varicella-zoster virus - microbewiki
https://microbewiki.kenyon.edu/index.php/Varicella-zoster_virus ▾ Prevedi ovu stranicu
 Preskoči na odjeljak **Host Immune Response** - When initially **infected** by naturally acquired **primary varicella-zoster virus**, the first response of the host is ...

Chickenpox | Clinical Overview | Varicella | CDC
<https://www.cdc.gov/chickenpox/hcp/clinical-overview.html> ▾ Prevedi ovu stranicu
 1. srp 2016. - Recovery from **primary varicella infection** usually provides **immunity** for life. In otherwise healthy people, a second occurrence of **varicella** is ...

Appendix 6 - Referral to a specialist form - The Lukavac Health Center

.....
 (The name of the health institution)

Outpatient's number

OUTPATIENTS
 POLYCLINIC

Referral to a specialist

in _____ diseases

The patient _____ born _____
 (Last and first name)

from _____
 (The residence) (The municipality of the residence)

Health-insurance card _____ relationship with the insured _____
 (Code / number)

6. **JMBG** (The Unique Master Citizen Number) _____

Insured _____
 (Last and first name of the health insured)

Health insurance payer _____
 (The name, registration number and the activity code)

**The Health Insurance Institute /
 The Workers / Farmers Health Care**

The above named is being referred to a medical specialist for an examination; and we are asking the opinion regarding the diagnosis, further treatment and the evaluation of the fitness for duty

Diagnosis (code)

type of the health care

OB (obligatory) / NP (accidents at work and professional diseases) / OZ (rights laid down by statute)

Comment: _____

In _____, date: 201 ...

.....

 (Facsimile and the doctor's signature)

Appendix 7 - Illustration of a specialist's report translation process

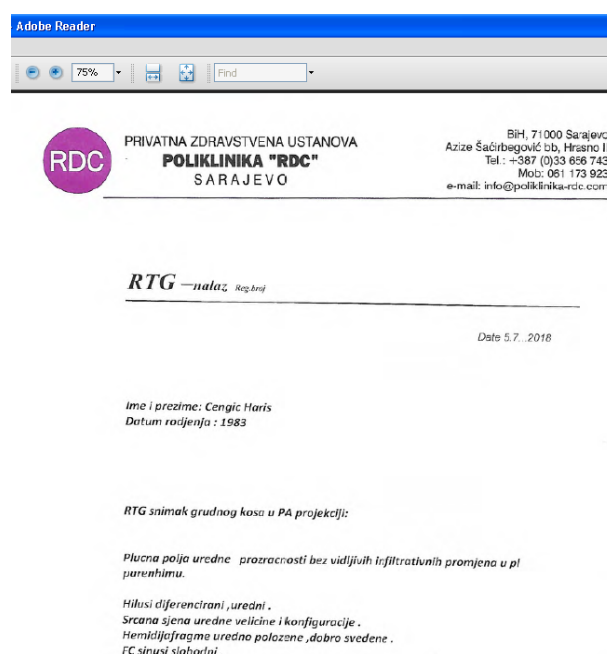
This is an illustration of a specialist's report translation process from receiving a document to producing the translation of it. It demonstrates how heavily translators depend on the internet, and Google. Not being trained in medical translation, and not being medical professionals, they have to double check even the things they believe they know, to avoid mistakes.

This example shows all the dilemmas and uncertainties a translator faces during the translation process. To make the process clear, it is presented in steps.

Step 1 - Reception of a document for translation

A client has sent a certified translator this report via e-mail for translation into English.

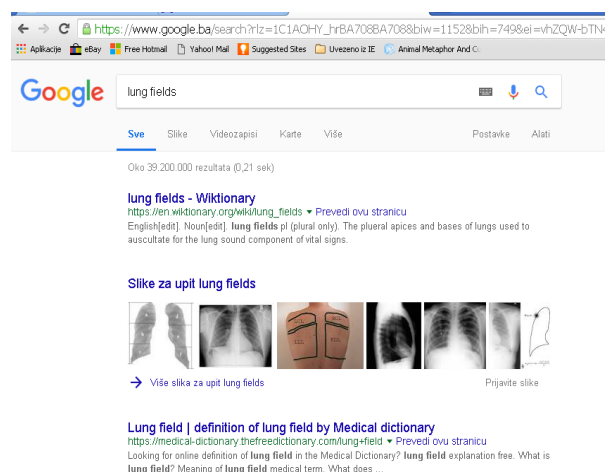
The translator prints the ST report and starts translating the text.



Step 2 - Translation process

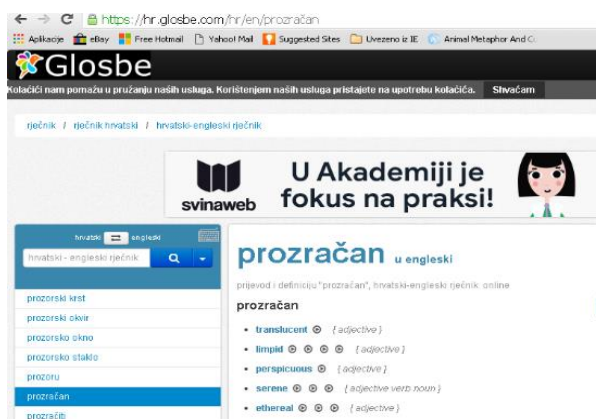
The translator starts facing the uncertainties from the very beginning. The first phrase the translator checks is 'plućna polja'. In order to make sure, he 'googles' the calque (loan translation) 'lung fields', to check if that phrase is used in English as such.

As seen to the right, it is. Therefore, the translator uses the phrase.



The next thing the translator checks is the word '*prozračnost*', which he is not sure how to translate in this context.

The translator goes to an online dictionary to see possible solutions.



He starts checking which of the translations collocate, or are used, with lung fields.

He finds out that translucent is used with the phrase *lung fields*.

[PDF] Translucent Areas in the Lung Field - Europe PMC

<https://europepmc.org/articles/...pdf/indmedgaz72584-0025.pdf> - Prevedi ovu stranicu
autor: LE Napier - 1942

Normally, the **lung fields** appear as **translucent** areas which are crossed by striate markings radiating from the hilum. These linear striae are shadows cast by the.

Translucent Areas in the Lung Field - NCBI - NIH

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5169342/> - Prevedi ovu stranicu
autor: LE Napier - 1942

Contributor Information. L. Everard Napier, From the School of Tropical Medicine, Calcutta. R. N. Chaudhuri, From the School of Tropical Medicine, Calcutta.

Chest X-ray Interpretation - Life in the FastLane

<https://lifeinthefastlane.com/investigations/cxr-interpretation/> - Prevedi ovu stranicu
29. kol 2017. - The trachea can be pulled towards an abnormal **lung** affected by ... Both **lung fields** should be equally **translucent**, and on the lateral view the ...

Chest X Ray Interpretation- Structured|Simple|Clear

www.jonathandownham.com/core-radiology/chest-x-ray/ - Prevedi ovu stranicu
B-bone. C-cardiac. D- diaphragm. E&F- equal (**lung**) fields. G- gastric bubble. H- hilum and mediastinum. I also have to add the T which stands for technicals.

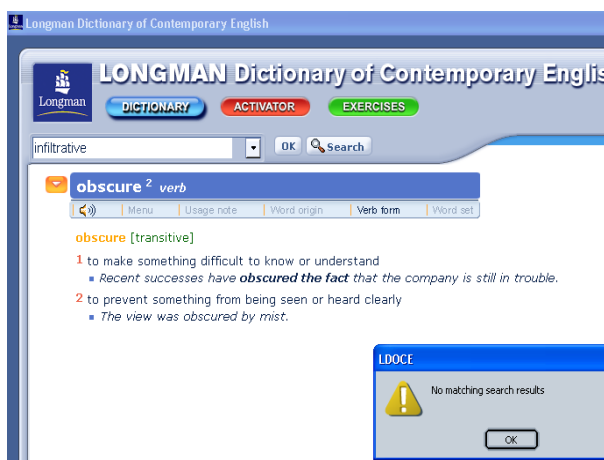
Slike za upit lung fields are translucent



Then he checks the adjective '*infiltrativne*'. He believes '*infiltrativne*' is yet another calque and the English word is '*infiltrative*', but he wants to be sure.

He uses *Longman Dictionary of Contemporary English* installed on his computer, to make sure.

As it is seen to the right, the word is not in the dictionary.



It frequently happens that technical/scientific words are not found in general dictionaries; therefore, the translator ‘googles’ the word. He finds out that the adjective ‘*infiltrative*’ exists, and he uses it.

The screenshot shows the website 'THE FREE DICTIONARY BY FARLES'. The search bar contains the word 'infiltrative'. Below the search bar, there are navigation options: 'Word / Article', 'Starts with', 'Ends with', and 'Text'. A menu at the top includes 'Dictionary', 'Thesaurus', 'Medical Dictionary', 'Legal Dictionary', 'Financial Dictionary', 'Acronyms', 'Idioms', and 'Encyclopedia'. A sidebar on the left has social media icons for Facebook, Twitter, and Google+. The main content area shows the definition of 'infiltrative' as an adjective meaning 'pertaining to or characterized by infiltration'. It also lists related terms like 'infiltrative cardiomyopathy' and provides a citation from Dorland's Medical Dictionary.

Then he checks whether *infiltrative* collocates with *changes*. He ‘googles’ the phrase, trying literal translation (*infiltrative changes* - adj. + plural noun). He finds an example of it, and uses the phrase in his translation.

The screenshot shows a Google search for 'infiltrative changes'. The search results page displays 'Oko 407.000 rezultata (0,32 sek)'. The top result is 'Infiltration (medical) - Wikipedia', with a snippet: 'Infiltration is the diffusion or accumulation of foreign substances or in amounts in excess of the ...'. The second result is 'Infiltrative | definition of infiltrative by Medical dictionary', with a snippet: 'Looking for online definition of infiltrative in the Medical Dictionary? infiltrative explanation free. What is infiltrative? Meaning of infiltrative medical term.'. The third result is 'Infiltrative - definition of infiltrative by The Free Dictionary', with a snippet: 'Define infiltrative, infiltrative synonyms, infiltrative pronunciation, infiltrative ... Echocardiography and CT showed minor residual infiltrative changes of AV sulcus ...'.

After that, he checks the phrase ‘*pl parenhima*’ from the source text. He knows that ‘*pl*’ stands for pulmonary or lung, but wants to see which of the two collocates with parenchyma.

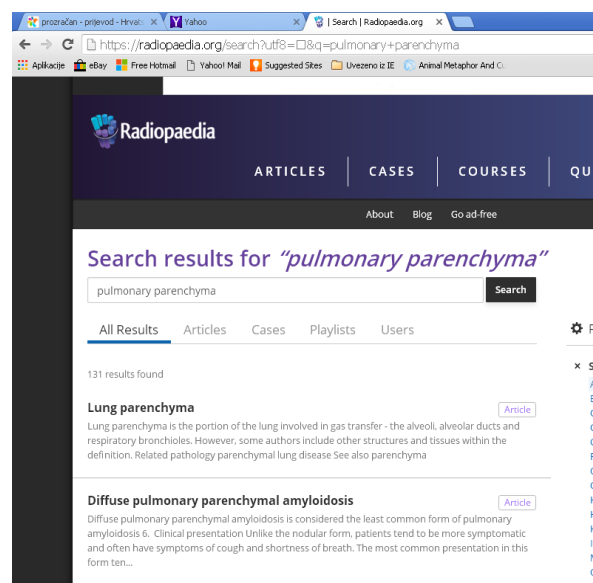
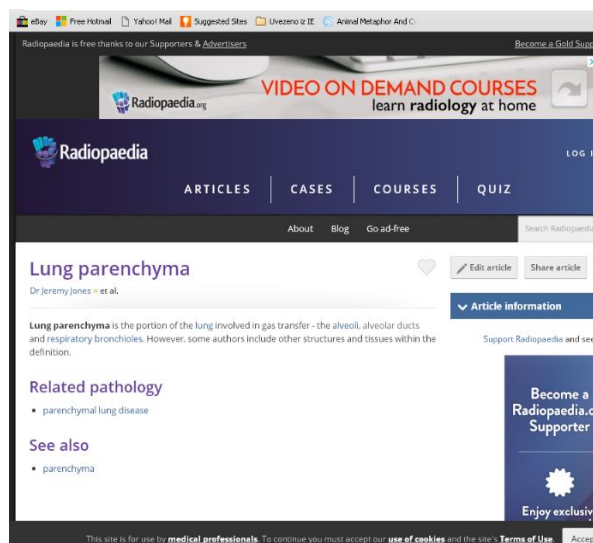
The screenshot shows a Google search for 'pulmonary parenchyma'. The search results page displays 'Oko 3.800.000 rezultata (0,35 sek)'. The top result is 'Pulmonary Parenchyma | List of High Impact Articles | PPTs | Journals ...', with a snippet: 'Pulmonary parenchyma refers to the portion of lung often used solely to alveolar tissue and any form of lung tissue including bronchioles, bronchi, bloodvessels, ...'. The second result is 'Lung parenchyma | Radiology Reference Article | Radiopaedia.org', with a snippet: 'Lung parenchyma is the portion of the lung involved in gas transfer - the alveoli, alveolar ducts and respiratory bronchioles. However, some authors include ...'. Below the search results, there is a 'Videozapisi' section with two video thumbnails. The first video is titled 'Lung Parenchyma What is Lung Parenchyma Lung Parenchyma' and has a duration of 2:48. The second video is titled 'Chest x-ray, lung parenchyma and interstitium' and has a duration of 5:52.

The screenshot shows a Google search for 'lung parenchyma'. The search results page displays 'Oko 4.380.000 rezultata (0,35 sek)'. The top result is 'Lung parenchyma | Radiology Reference Article | Radiopaedia.org', with a snippet: 'Lung parenchyma is the portion of the lung involved in gas transfer - the alveoli, alveolar ducts and respiratory bronchioles. However, some authors include ...'. The second result is 'Lung Parenchymal Mechanics - NCBI - NIH', with a snippet: 'The lung parenchyma comprises a large number of thin-walled alveoli, forming an enormous surface area, which serves to maintain proper gas exchange.'. Below the search results, there is a 'Videozapisi' section with two video thumbnails. The first video is titled 'Lung Parenchyma What is Lung Parenchyma Lung Parenchyma' and has a duration of 2:48. The second video is titled 'Micro-Mechanical Characterization of Lung Tissue Using Atomic Force ...' and has a duration of 11:10.

According to the sites, both can be used interchangeably; however, he wants to make sure there is no difference between lung parenchyma and pulmonary parenchyma.

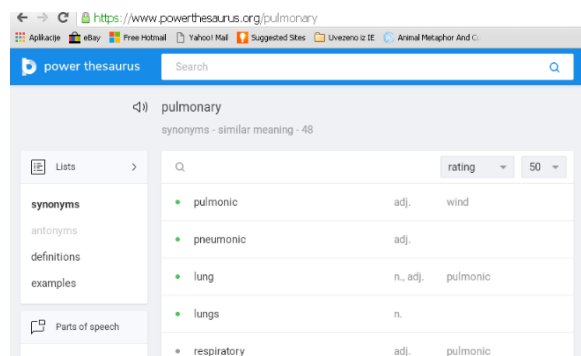
He checks the meanings of both the phrases.

It seems there is no difference.



To make sure, he also checks if pulmonary and lung (as adjectives) are synonyms. It shows they are.

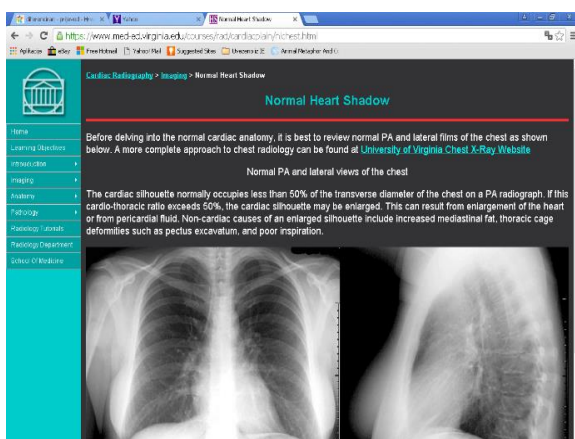
He opts for pulmonary parenchyma to use the elevated (medical) register.



The next phrase he needs to check is 'srčana sjena'. Again, he supposes it is a literal translation, *a heart shadow*.

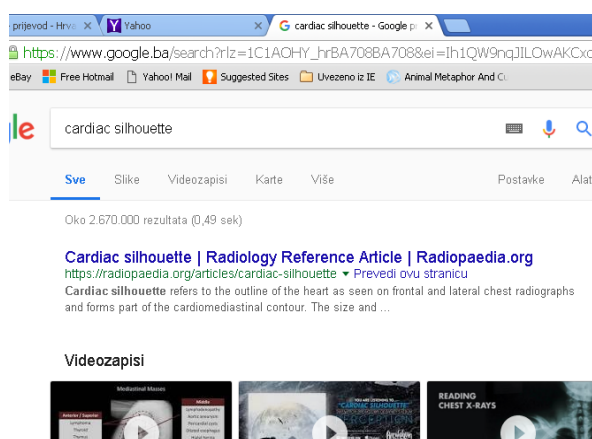
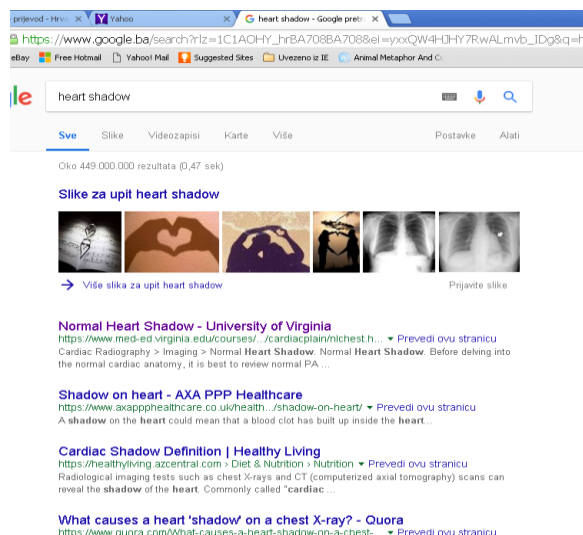
He googles the phrase in English.

He finds examples of the phrase on the internet, but another phrase appears to be more common, a cardiac silhouette. He opts for that one, but decides to check its meaning first.



Another word he checks is 'konfiguracija'. It is probably the same case, another calque. However, it needs to be confirmed.

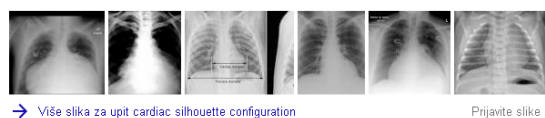
The noun configuration ('konfiguracija') is used to describe heart in an X-ray image (see the image to the right).



Heart Size, Overall Configuration, and Specific Chamber Enlargement ...
<https://radiologykey.com/heart-size-overall-configuration-and-sp...>

[PDF] 8 Heart Size, Overall Configuration, and Specific ... - Thieme Connect
<https://www.thieme-connect.de/products/.../b-0034-75378.pdf>

Slike za upit cardiac silhouette configuration



Chest X-ray Anatomy - Heart size and contours - Radiology Masterclass
https://www.radiologymasterclass.co.uk/.../chest_anatomy_page8

Finally, there is *just* one more phrase, '*FC sinusi*' left for the translator to check. First, the translator tries to find what the abbreviation *FC* stands for in this particular case. He 'googles' the phrase.

After finding the meaning, he finishes the translation.

The screenshot shows a web browser window with the URL https://www.proz.com/kudoz/croatian_to_english/other/2284358-fc_sinusi.htm. The page title is 'f.c. sinusi' and the English translation is 'phrenicocostal sinus'. Below the translation, there is a prompt to 'Login or register' and a 'GLOSSARY ENTRY (DERIVED FROM QUESTION BELOW)' section. This section lists the Croatian term 'f.c. sinusi', the English translation 'phrenicocostal sinus', and the user 'eleonora_r'. The entry was created on 03:27 Nov 30, 2007.

Step 3 - Checking the translation

The translator reads the translation and compares it to the original document, the source text (ST). Being satisfied with it, he adjusts the font and layout, and then prints the translation, signs, stamps, scans, and sends it to the client. He writes down the required information about the translated document in the register of translations and verifications.

The screenshot shows a medical X-ray report from RDC POLYCLINIC SARAJEVO. The report is dated July 5, 2018, and is for a patient named Mr. Haris Cenik, born on 11.08.1993. The report describes a posteroanterior (PA) chest x-ray. The findings are: 'The lung fields appear as translucent areas with no visible infiltrative changes in the pulmonary parenchyma.', 'The hilus are prominent, normal', 'The size and configuration of the cardiac silhouette are normal.', 'The hemidiaphragms are normally positioned.', and 'The phrenicocostal sinuses are free.' The conclusion states: 'The chest X-ray shows no pathological changes.'

Conclusion

It is obvious from the example that translation of physicians'/specialists' reports is time consuming, because translators are not dealing with everyday language. The internet facilitates, or should we say make the whole process possible, allowing translators/interpreters to look up, check or confirm words and phrases, usually not found in ordinary dictionaries, that they do not know, or are not certain of. As Baker (1992) says in her book, in a chapter talking about Collocation and register, "Some collocations may seem untypical in everyday language but are common in specific registers." This example demonstrates that general (unlike specialized) translators, as the translators in the Federation of Bosnia and Herzegovina are, have to consult many websites to translate a technical/scientific text, such as this short doctor's/specialist's report.

Appendix 8 - Example of an audio medial report

A Health Institution - The Azabagić Polyclinic
A Medical and Diagnostic Center
(The Center's logo)

Address: 21 Mitra Trifunovića - Uče, 75000 Tuzla, BiH
Telephone: +387 35 30 20 10
Fax: +387 35 30 20 11
Email address: contact@mdc.ba

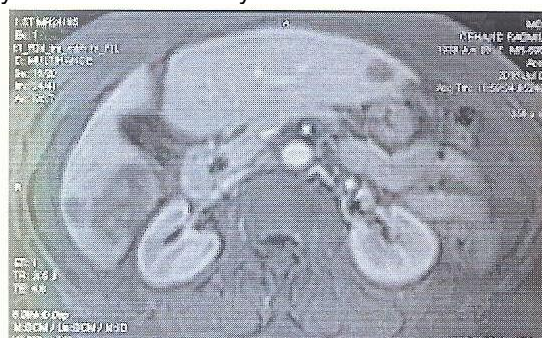
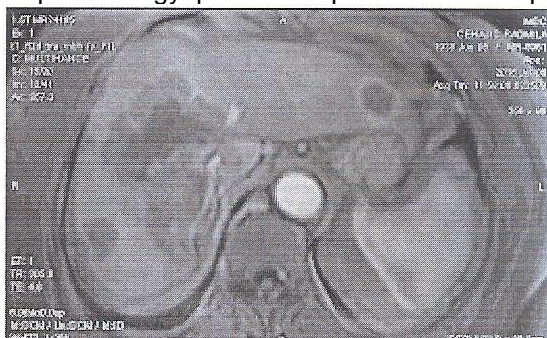
Last and first name:	XXXXXXXXXXXX	National Identification number:	XXXXXXXXXXXX
Reference number:	MR - 8961	Date of the report:	July 6, 2016
Referred by:	a specialist in family medicine	Sex:	Female

MR IMAGING OF THE ABDOMEN WITH A 1.5 T MRI**Anamnesis:**

Two months ago, she had Helicobacter pylori discovered. The patient received therapy and the findings normalized. However, she is still complaining about nausea, sickness, and loss of appetite. She has lost 12 kilos. She suffered a stroke three years ago.

She denies any other problems. She is not suffering any pain.

The abdominal ultrasound performed on July 02, 2016 shows some irregular focal changes in the right lobe of the liver, of open etiology /possible deposit/. The renal parenchyma in the left kidney is thickened.



MR IMAGING OF THE UPPER ABDOMEN: T1W, T2W, in-phase and out-of-phase images of the abdomen in axial and coronal planes have been made. Axial T1W FS images were made before and after the intravenous application of the paramagnetic contrast agent.

The anteroposterior (AP) diameter of the liver is 16 cm. The left lobe is significantly enlarged with a large irregular change (125x47x79 mm) in the right lobe - T1W hypo, T2W heterogeneous signal intensity with a decrease in signal intensity on T2 weighted image. There is also another one with the same MR characteristics, which is 71x66x42 mm big, as well as numerous round changes 16.35 mm in diameter with marginal post-contrast signal enhancement. The gallbladder has no signs of inflammation or calculosis. The intra- and extra-hepatic bile ducts are not dilated. In the lumen, no pathological content is being seen. The pancreas has normal morphology and normal structure of the parenchyma. There are no expansive or infiltrative changes or fluid collections. The pancreatic duct is not dilated. The spleen has the widest longitudinal diameter of 12.2 cm, the transversal diameter of approximately 3 cm around the hilum, with no focal lesions. The kidneys are normally positioned and normally big, they have normal morphology, and normal corticomedullary contrast, without focal parenchymal lesions or hydronephrosis. The adrenal glands have normal morphology. In the examined regions of the retroperitoneum, as well as mesenterium, there is no lymphadenomegaly, and there are no expansive lesions. The bone structures in the examined area are without infiltrative or destructive lesions. There is no free fluid or fluid collections in the abdomen.

CONCLUSION: 1) THE LIVER HAS SIGNIFICANTLY ENLARGED LEFT LOBE WITH TWO BIG CHANGES IN THE RIGHT LOBE, WHICH INDICATES HEPATOCELLULAR CARCINOMA (HCC) WITH MULTIPLE SECONDARY DEPOSITS IN BOTH LOBES.

2) SEE AN ONCOLOGIST.

Please find enclosed the CD of the examination.

Consultant

(A round stamp)

Doctor
Dr. Sead Dizdarević
a radiologist

(A signature and a rectangular stamp)

Appendix 9 - Examples of translations of doctors'/specialists' reports issued in different countries

Appendix 9 contains copies of thirteen translations of doctors'/specialists' reports, as follows: one copy of a translation of a physician's/specialist's report issued in Montenegro (L1-L2), one in Serbia (L1-L2), five in Bosnia and Herzegovina (L1-L2), one in the UAE (L2-L1), one in Croatia (L1-L2), one in the FYRO Macedonia (L2-L1), one in the USA (L2-L1), and two in Australia (L2-L1).

Number: 425

The institution: **A Public Health Institution, the Berane General Hospital**
 Department: **The Internal Medicine**
 Outpatients: **The Cardiology Subspecialist Outpatients**

THE SPECIALIST PHYSICIAN'S REPORT

Last and first name of the insured XXXXXXXXXXXXXX	Year of birth 1960	JMBG (<i>The Unique Master Citizen Number</i>) 111111111111
Place of residence / address	The Fund's regional unit	Health Insurance Card Number
Participation <i>The insured does not participate in the medical expenses of the treatment</i>	Mode of insurance	Type of insurance

ANAMNESIS:

The patient was admitted to the coronary unit IO OB BA on February 13, 2017, due to LOCALIZATION OF STEMI: ANTERIOR WALL He was given thrombolytic therapy, after which he suffered ventricular fibrillation (VF) arrest and received 13 defibrillations at 270 joules of biphasic current. He was referred to the Cardiology clinic. He had High-Definition Oscillometry (HDO) done and had a stent implanted in LAD. He is still undergoing hospital treatment.

CLINICAL FINDINGS:

-

THE RESULTS OF THE ANALYSES/TESTS:

-

THERAPY/TREATMENT:

-

RECOMMENDATION:

The patient has been undergoing hospital treatment since February 13, 2017.

DIAGNOSES:

INFARCTUS MYOCARDII ACUTIS PARIETIS ANTEROSEPTALIS (*In Latin*)
 FIBRILLATIO VENTRICULORUM PRIMARIA, DEFIBRILATIO (*In Latin*)
 S/P IMPLANTATIONEM STENTI AD LAD (*In Latin*)

DIAGNOSIS: ACUTE TRANSMURAL MYOCARDIAL INFARCTION OF ANTERIOR WALL

121.0
 Diagnosis code

BERANE, February 18, 2017
 Place and date

(A round stamp)

(A rectangular stamp)
 210030 Dr. Babović Aleksandar, a specialist
 (Physician - signature and facsimile)

A PUBLIC HEALTH INSTITUTION - THE LUKAVAC HEALTH CENTER
Specialists' services *(A rectangular stamp)*
THE INTERNAL MEDICINE DIVISION

PP-1921/2018

Ms. XXXXXXXXXXXXX
 DOB June 29, 1983
 L U K A V A C

Specialist's report (the findings and opinion)

Blood pressure 160/100 mmHg

EKG - sinus rhythm, the heart rate is 80 beats per minute, there is a mild ST segment elevation

The patient has come for the follow-up accompanied by her brother. Yesterday, she was taken to the Internal Medicine Clinic at the Tuzla University Clinic Center by ambulance, due to suspicion of myocardial infarction. After thorough examination, the patient was suggested undergoing a coronary catheterization. The physicians explained her there was a possibility that she would have to have a stent implanted or undergo a heart surgery (bypass surgery). Such surgeries are very expensive and risky, and have to be paid in advance. The patient said she had to think about it and that she had to consult with her husband. She was given the date and time for the coronary catheterization - July 20, 2018 at 10:00.

The patient is conscious, communicative, oriented to place and time. Occasionally, she suffers chest pain, heart-pounding, shortness of breath, and she is nervous.

Diagnoses: Unstable angina (UA)
 Suspicion of myocardial infarction
 Arterial hypertension
 Mixed anxiety–depressive disorder (MADD)

Treatment: Diet
 Konveril Plus 20 mg tablets - one a day
 Monosan 20 mg tablets - one a day
 Plavix 75 mg *(film-coated)* tablets - one a day
 Nitroglycerin lingual spray - as needed
 Flusetin 20 mg *(film-coated)* tablets - one a day
 Bosaurin 5 mg tablets - one a day

She needs to have an echocardiogram, an abdominal and kidney ultrasound done.
 The follow up is scheduled in 7 days. If needed, she may see me even earlier.

Lukavac, June 04, 2018

(A round stamp)

(A rectangular stamp)
 Head doctor, Teufik Arapčić
 A specialist in internal medicine
(An illegible signature)

The 'Dr. Šuvalić' Gynecologist's Office

Hadžikadijna bb Street, Gračanica

++387 61 193 805

IB (Identification number):

THE FIRST AND LAST NAME OF THE PATIENT:

XXXXXXXXXXXXXXXXXXXXXXX

Y.O.B.

1989

CHILDBIRTH:

0

ABORTION:

0

MENSTRUAL PERIOD:**DUE DATE:****SPECIALIST'S REPORT** (*findings and opinion*)**ANAMNESIS:**

She has come to see me due to abdominal pain and heavy bleeding. She has been taking Yaz (birth control) pills for the last three months; however, she has been bleeding continuously.

GYNECOLOGICAL (OBSTETRIC) EXAMINATION:

Using speculum, some dark secretion/discharge is being seen in the vagina. Macroscopically, the cervix looks normal. Her left adnexal region is very tender to palpation.

TRANSVAGINAL ULTRASOUND (TVS) / ULTRASOUND FINDINGS:

The transvaginal ultrasound - the uterus in anteversoflexion position (AVF), there is a 2.5 mm uterine myoma. The right ovary looks normal (30 mm big). The left ovary is underneath the uterus, and there is a heterogeneous echogenic cyst (62 mm big). In the pouch of Douglas, there is some free fluid.

DIAGNOSIS:Dg Cysta ovarii l. sin endometrioides (*In Latin*)**TREATMENT:****DOCTOR'S ORDERS:**

Requires surgery

DATE:

November 2, 2015

Dr. Šuvalić Munevera
A specialist in obstetrics and gynecology

(Signature and a stamp)



The Life*m Polyclinic

B3/2 Stupine Street

75000 Tuzla, Bosnia and Herzegovina

Tel./Fax: +387 35 277 666; Mob: +387 61 068 665

Web: www.poliklinikalifem.com.ba;

The follow-up

Mr. XXXXXXXXXXX, Y.O.B. 1973, from Lukavac

He is taking Favistan tablets 5 mg (the maintenance dose)

He is putting on weight, feels tired,...

The findings about the neck - a diffusely thickened (thyroid) gland

P:80

Hormonal findings: in remission, on the threshold (TSH)

TSH 0.196

T4 133

T3 1.43

The thyroid ultrasound

The right lobe is 54x28x24 mm big, and the left one is 52x23x28 mm big.

The tissue of both the lobes is moderately hypoechoogenic and inhomogeneous.

The other findings about the neck are normal.

Conclusion: The (thyroid) gland is diffusely thickened, with slightly changed echostructure

Diagnoses: Hyperthyreosis

Struma diff.gl.thyreoideae (In Latin)

Treatment: Favistan (tablets) 5 mg - before breakfast

Lexaurin (tablets) 3 mg - two a day

The follow up with regard to the thyroid gland is scheduled in 3 to 4 months

Tuzla, October 31, 2017

(A round stamp)

Head doctor Mirsad Malohodzic

A specialist in nuclear medicine

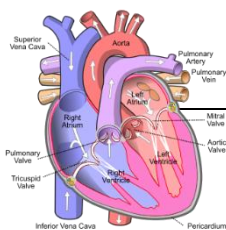
(Signature and a rectangular stamp)

A Public Health Institution
THE LUKAVAC HEALTH CENTER

Secretary: +38735 553-056
 Switchboard: +38735 553-212
 Fax: +38735 553-467
<http://www.dzlukavac.co.ba>

ECHOCARDIOGRAPHY

Mr. XXXXXXXXXXXX, born in 1960, **50** years of age, residing in **Puračić**



The Head of the Division
of the Diagnostic
Ultrasound

Teufik ARAPČIĆ

A specialist in internal
medicine

Tel: +387 35 553 212

	NORMAL VALUES	FOUND VALUES
AO (aortic root)	2.0-3.7 cm	2.9
LA (left atrium)	2.0-4.0 cm	3.3
LVDD (left ventricular diastolic diameter)	3.5-5.6 cm	5.0
LVSD (left ventricular systolic diameter)	2.4-3.8 cm	3.5
IVS (interventricular septum)	0.6-1.1 cm	0.9
PW (posterior wall)	0.7-1.1 cm	0.9
RV (right ventricle)	below 3.0	2.6
EF (ejection fraction)	55-75%	67%
FS (fractional shortening)	28-40%	
AO (aortic root)	2.0-3.7 cm	

Opinion:

The heart chambers and walls have normal dimensions. The regional and global myocardial kinetics are normal.

The morphologic findings about the aortic valve are normal (V max 1.7 m/s). The anterior cusp of the mitral valve is distinct, with normal degree of mitral valve (MV) coaptation (V max 1.2 m/s). Morphologically, as well as functionally, the findings about the other valves are normal. The pericardium is normal, too.

CONCLUSION:

Date: November 10, 2010

Examined by: Dr. Sedija ARAPČIĆ - a specialist in internal medicine



The Bosnia and Herzegovina Heart Center in Tuzla

A STRESS TEST

- Findings -

Reference number	Patient's last (father's) and first name	JMBG (National ID number)	Date of birth
7215/2017	XXXXXXXXXX () XXXXXXXXXXXX		June 24, 1978

CURRENT THERAPY/TREATMENT: NONE
THE TEST PROTOCOL: THE BRUCE TREADMILL TEST PROTOCOL
TEST TIME: 7 minutes and 20 seconds
MAXIMUM LOAD: 13.4 METS
EKG DURING LOAD: Sinus tachycardia without cardiac ectopy and acute dynamics - sympatheticotonia
SYMPTOMS DURING LOAD: NONE
BLOOD PRESSURE DURING THE TEST: normally follows the load
THE TEST WAS STOPPED DUE TO: the scheduled maximum load has been achieved
THE STRESS TEST IS: negative
CONCLUSION AND COMMENT: This is the stress test performed in order to obtain objective evaluation of the functional capacity. The dynamic stress test is being performed on a treadmill, according to the standard Bruce treadmill test protocol. The EKG at rest: sinus rhythm, with no signs of actual ischemia The test time is 7 minutes and 20 seconds. The supramaximal load achieved is 113.4 METS, which is 134% from what is anticipated for his age, gender and constitution. Subjectively, during the stress test, he denied typical angina-like problems or shortness of breath (dyspnea). The EKG during the stress: appropriate tachycardia, neither ectopic activity, nor significant ST segment changes have been provoked Blood pressure and the heart rate properly match the load. During recovery, there is quick normalization of the EKG, the blood pressure and the heart rate. The test was stopped because the supramaximal load was achieved. Sufficient cardiopulmonary capacity has been demonstrated.

(A round stamp)

<i>In Tuzla, December 07, 2017</i>	<i>(An illegible signature)</i> Mr. med.sci.dr Enes Osmanović 094322007 <i>An internist - a cardiologist</i>
------------------------------------	---



Radiološki nalaz

Ime pacijenta	XXXXXXXXXXXX	Nalog broj	IORD00372299
ID broj pacijenta	0162921	Datum posjete	10.12.2014. godine
Spol	M	Doktor koji šalje pacijenta	Dr. HAYDER ABED MATOUK
Dob (Datum rođenja)	07.06.1985. godine	Nalaz ovjeren	10.12.2014. godine u 21:45:34
Nalaz	CT VRATA	Prioritet	
Datum nalaza	10.12.2014. godine u 19:35:21		

CT - VRATA

Kliničke napomene: Povreda izazvana eksplozijom

CT tehnika: Nekontrastne aksijalne i reformatirane slike

Nalaz CT-a:

- U mekom tkivu desne strane vrata nalaze se dva **metalna gelera**, jedan u nivou C2 pored neuralnog luka a drugi u donjem dijelu vrata, otprilike u nivou C5, oba su prilično duboko. Treći se vidi u predjelu desnog nepčanog krajnika. Mjesto ulaska gelera sa nešto zraka i sićušnim stranim tijelima je vidljivo odzada, u blizini zamišljene okomite linije kraja tijela (nivo C5/6).
- Nazogastrična sonda je na svom mjestu.
- **Ždrijelo, grkljanski poklopac (epiglottis)/grkljan i dušik** su neoštećeni sa čistim prostorom dišnog puta. Štitna žlijezda, pljuvačna žlijezda, jednjak, mišićne ravni i vaskularna obilježja su u granicama normale. Nema dokaza o lokalnim mass lezijama.
- **Kičma izgleda neoštećeno.** Nema vidljivih povreda vratne kosti (*kičme*).
- Ne vide se nikakve osobenosti na prevertebralnim i paravertebralnim mekim tkivima.

Dojam: Molimo vas da napravite korelaciju i obavite daljnju procjenu.

Dr. A. Altamimi, MD (Doktor medicine), DMRD (specijalista radiodijagnostike), FRCR (član kraljevskog koledža radiologa), Radiolog konsultant

(Potpis, pečat i dva datuma)

NALAZ SE POTPISUJE ELEKTRONSKI

Ovjerio radiolog Dr. ABDULADEEM ALTAMIMI
10.12.2014. u 22:54:56

Datum i vrijeme štampanja:

Kanadska specijalistička bolnica srdačno vas dočekuje u Dubaiju, gradu u kome se okupljaju nacije





A special hospital for orthopedics
and general surgery Dr. Nemeč

MATULJI

Matulji, October 03, 2017

Mr. XXXXXXXXXXXXXXXX (D.O.B.) **June 19, 1984** (Age) **33**
XXXXXXXXXX STREET, 75300 TUZLA, BOSNIA AND HERZEGOVINA

DOCTORS REPORT *(Findings)*

Anamnesis:

The patient suffered a right knee injury more than a year ago. Therefore, he underwent ACL ligamentoplasty at another institution on February 30, last year. Several days later, he was again admitted to the hospital due to septic arthritis (infectious arthritis). After irrigation and antibiotics, the problem was solved. He has come for an examination due to pain in his knee when he flexes the quadriceps. He also feels pain in his knee when he sits for a long time and when he is standing up.

Status:

The knee is not irritated, the movements are normal, and it is stable.

Diagnosis:

Ligamenoplastica ACL genus dex. *(In Latin)*

ICD-10 diagnoses:

Main diagnosis:

Recommendation:

Hyalubrix 60 injected in the knee
The follow up is scheduled within six months.

MANAGER
Prof. dr. sc.
Boris Nemeč
M.D.
an orthopedist

doc. dr. sc.
Boris Lah
M.D.
an orthopedist

head doctor mr. sc.
Ernest Irha
M.D.
an orthopedist

Ratko Salamon
M.D.
an orthopedist

Tomislav Anić
M.D.
an orthopedist

Domagoj Perković
M.D.
an orthopedist

dr. sc.
Damir Štifić
M.D.
an anesthesiologist
DEAA

(A rectangular stamp)
(An illegible signature)
Prof. dr. sc. BORIS NEMEČ
M.D.
A specialist in orthopedics
0063371

(A rectangular stamp)

The hospital for orthopedics and general surgery Dr. Nemeč MATULJI

Cesta dalmatinskih brigada 30/a Street | 51211 Matulji, Hrvatska (Croatia) | Tel.: +385 51 277 350, + 385 51 277 406 | Fax: +385 51 273 901

ID number 1960881 | OIB (Personal Identification Number) 33728852158 | Erste&Steiermarkische bank d.d. (JSC) | IBAN HR9824020061100440081

BOLNICA SVETI LAZAR - SKOPLJE
Ulica Novoproektirana bb
Tel.: +389 2 5112 016
Faks: +389 2 5112 017

Ime i prezime: XXXXXXXXXXXXX , rođena 1962. godine

Dijagnoze: miomatozna maternica, menopauzno maternično krvarenje,
anemica gravis.

Zbog gore navedenih dijagnoza, pacijentici je preporučena hitna eksplorativna kiretaža. Nakon dobijenog rezultata histopatološkog testa, te zbog povratnog obilnog krvarenja koje je kod pacijenta uzrokovalo anemiju, preporučuje se hirurški zahvat - histerektomija.

Skoplje,
27.07.2010. godine

Okrugli pečat: *Privatna zdravstvena ustanova - Specijalistička bolnica za
ginekologiju i materinstvo SVETI LAZAR SKOPLJE*

Specijalista ginekologije i akušerstva

Dr. Stanka Dimitrova

*Lični pečat: Dr. Stanka Dimitrova
Specijalista ginekologije i akušerstva
56022*

XXXXXXXXXXXXXX

Gwinnett Clinic

MRN: _FIX1_GWC100694

475 Philip Blvd. Suite 100 - Lawrenceville, GA (Savezna država Georgia, SAD) 30045
Telefon: (770) 995-3300 - Telefaks: (770) 995-3307

Datum ispitivanja:	10.04.2012. godine u 8:41:55 ujutro	Datum prijema:	10.04.2012. godine u 12:10:23 navečer
Pacijent:	XXXXXXXXXXXXXX ' ,	Objekat:	
Mrn:	_FIX1_GWC100694	Način:	MR
Spol:	Ž	Opis:	DESN0 RAME
Dob:	56 godina starosti	Dio (dijelovi) tijela:	
Datum rođenja:	15.09.1955. godine	Uputio:	JJ SHAH
		Poslati telefaks:	Lawrenceville-1a Gwinnett, Clinic
Datum nalaza:	11.04.2012. godine u 4:28:04 poslije podne		

Snimak desnog ramena magnetnom rezonancom**Klinička indikacija:** Bol u desnom ramenu**Tehnika:** Multiplanarna projekcija, dobijeno je više slika kroz desno rame, bez kontrasta.**Poređenje:** Nije bilo**Nalaz:** Ispitivanje pokazuje normalnu artikulaciju, desno rame. Nema znakova frakture ili osteonekroze.

Zgušnjavanje i povišen signal na T2 primjećen je unutar distalne supraspinozne tetive. Horizontalni kosi signal primjećen je kroz srž ove tetive na mjestu vezivanja. Upadljiv povišen signal također je primjećen i u distalnoj subskapularnoj i u infraspinoznoj tetivi.

Labrum nije optimalno ocjenjen na bezkontrastnom ispitivanju. Međutim, primjećena je značana ateanacija (prigušenje) superiornog labruma. Primjećeno je oticanje subakromijalne burze uslijed nakupljene tekućine.

Akromioklavikularni zglob je normalan. Zgušnjavanje i povišen signal na T2 primjećen je unutar tetive bicepsa.

Utisak:

Primjećeno je jako iščašenje i ruptura supraspinozne tetive zajedno sa rupturom nalik otvoru za dugme cijelom širinom kroz distalnu supraspinoznu tetivu.

Primjećeno je jako iščašenje i ruptura infraspinozne i subskapularne tetive.

Postoji sumnja na parcijalnu rupturu superiornog labruma.

Primjetna tendinoza bicepsa i tenosinovitis.

Subakromijalni burzitis

Preporučuje se klinička korelacija.

(Nečitak potpis)

Nayer U. Islam, doktor medicine

The Radiology Group (Radiološka grupa), LLC (d.o.o.)



Optometrists

Optometričari

Nalaz ljekara specijaliste

DATUM

ZA

KLINIKA

Telefaks 9852 0223

Ime pacijenta

Datum rođenja pacijenta

Adresa

Razlog dolaska: Uobičajeni pregled Drugo: *Prvi pregled očiju u ovoj ustanovi*

Bez pomagala/ Potpomognuta vidna oštrina: D 6/6 L 6/- Napomena: *Sljepoća - nema opažanja svjetlosti - povreda u ratu 1993.*

Refraktivna greška: Miopija Hiperopija Astigmatizam Presbiopija

Naočale: Nisu potrebne Nema promjene Nove Kontaktne leće
Za čitanje

Očno zdravlje: Prednji/zadnji dio oka u granicama normale Otkrivene nepravilnosti

Klinički nalaz: *Desno oko normalno, lijevo oko sljepoća, povrede iz rata - nema liječenja*

* *Nema znakova hipertenzivne retinopatije ni na jednom oku.*

Intraokularni pritisak: Normalan Patološki *Normalan u DO*

Drugi očni nalazi: _____

Kontrola: 24 mjeseca (Uobičajena) Drugo: *Kontrola svake godine*

Potrebna uputnica: Ne Da _____

Potpis optometričara: _____
(Nečitak potpis)

Ime optometričara: _____
(Czarina Igno)

Specsavers Optometrists Sunbury
70 - 72 Evans St (ulica)
SUNBURY VIC 3429
T: 03 9740 6584
F: 03 9740 3670
ABN: 86 127 925 946
www.specsavers.com.au/
sunbury

Optometričari:

BRENDAN MYERS

Bečelor optometrije, Pružatelj očne terapije br. 2102371F

YASEMIN BALKIS

Bečelor optometrije, Pružatelj očne terapije br. 4333801F

ADINE WIELD

Bečelor optometrije, Pružatelj očne terapije br. 4759782T

TUONG NGHIEM

Bečelor znanosti vida, Master optometrije, Pružatelj očne terapije br. 5007151X



Shop (radnja) 7, Foundry Road (cesta)
Sunshine
VIC (Savezna država, Viktorija) 3020 Australia (Australija)

25. SEPTEMBAR 2017. T (03) 9313 1800
F (03) 9312 0310

www.hearing.com.au

20. septembar 2017. godine

Dr. Arun Kumar
MEDICINSKI CENTAR SUNBURY
12-28 MACEDON ST (ulica)
SUNBURY VIC (Savezna država Viktorija, Australija) 3429

Poštovani Dr. Kumar,

Predmet: Mr. XXXXXXXXXXXX
Datum rođenja: 21. septembar 1968. godine

Danas sam pregledao Vašeg pacijenta i obavio audiološku dijagnostiku. Dostavljam Vam sažetak nalaza i preporuke.

RAZLOZI DOLASKA:

* Problemi sa trenutnim slušnim aparatima

Komentar:

Gospodin XXXXXXXXXXXX izjavljuje da je prestao nositi slušne aparate jer je izgubio desni, a lijevi ne radi kako bi trebao.

REZULTAT AUDIOLOŠKOG NALAZA I PREDUZETE MJERE:

* Procjena sluha otkrila je da ne postoje značajne promjene stepena sluha

* Slušni aparati bit će ispitani/postavljeni

Komentar:

Sluh Gospodina XXXXXXXXXXXX poslednji put je ocjenjen 2011. godine. Današnji rezultati pokazuju blago poboljšanje nivoa sluha u odnosu na prethodnu procjenu. Rezultati su pokazali blagi senzorneuralni gubitak sluha na lijevo uho te blagi do umjereni mješoviti gubitak sluha na desnoj strani. Osnovni sluh je simetričan između dva uha.

Gospodin XXXXXXXXXXXX očekuje nove slušne aparate i žarko želi da mu se postave ovi aparati zbog poteškoća koje ima u trenutnoj komunikaciji.

DRUGE RADNJE I PREPORUKE ZA LIJEČNIKA:

* Nije potreban nikakav dodatni postupak

Slobodno mi se lično obratite ukoliko imate bilo kakvih pitanja ili ukoliko vas nešto zanima.

Srdačan pozdrav,

(Nečitak potpis)

Georgina Cameron

Audiolog

Australian Hearing (Australijski centar za sluh)

PRIMJERAK ZA: Gospodina XXXXXXXXXXXX

Appendix 10 - List of abbreviations used in doctors'/specialists' reports

This is the list of the abbreviations used in the doctors'/specialists' reports translated by the translator/interpreter whose database we have used for the qualitative research. The abbreviations have been used in the doctors'/specialists' reports issued by doctors/specialists from different divisions of the Lukavac Health Center. Some have been more frequent (e.g. hypertension) than the others (e.g. PPV standing for Pars plana vitrectomy¹¹); and some have been more obvious (e.g. CHOL for Cholesterol) than the others (e.g. SC, which is the abbreviation of a Latin phrase meaning Without Correction).

ACS	Acute coronary syndrome
AF	Atrial fibrillation
AHDL	Alveolar Hydatid Disease of the Liver
ANS	Autonomic nervous system
AO	Aortic root
AOM	Acute otitis media
AVF	Anteflexion with anteversion of the uterus
BC	Conjugated bilirubin
BCG	Bacillus Calmette–Guérin vaccine
BMI	Body mass index
BP	Blood pressure
BU	Unconjugated bilirubin
CABG	Coronary artery bypass grafting
CBC	Complete blood count
CDU	Color Doppler ultrasonography
CFR	Coronary flow reserve
CHOL	Cholesterol
CRL	Crown rump length
CVA / CVI	Cerebrovascular accident / cerebrovascular insult
EF	Ejection fraction

¹¹ According to Wikipedia (<https://en.wikipedia.org/wiki/Vitrectomy>), “Pars plana vitrectomy is a general term for a group of operations accomplished in the deeper part of the eye, all of which involve removing some or all of the vitreous humor—the eye's clear internal jelly.”

EKG / ECG	Electrocardiogram
FBS	Fasting blood sugar
FOS	Left eye ophthalmoscopy
FS	Fractional shortening
GMS	Gross muscular strength
HDL	High Density Lipoprotein
Hgb	Hemoglobin
HLP	Hyperlipoproteinemia
HLP	Hyperlipidemia
HTA / AHT	Arterial hypertension
IVS	Interventricular septum
LA	Left atrium
LDL	Low Density Lipoprotein
LL	Lumbar Lordosis
LS	Lumbar spine
LVDD	Left ventricular diastolic diameter
LVSD	Left ventricular systolic diameter
MADD	Mixed anxiety–depressive disorder
MI	Myocardial Infarction
MMI	Maximum medical improvement
NYHA	New York Heart Association
OA	Osteoarthritis
OD	Oculus dexter (Right eye)
OS	Oculus sinister (Left eye)
PA	Physician assistant
PA	Posteroanterior (From back to front - e.g. X-ray)
PA	Pulmonary artery
PEF	Peak expiratory flow
PPV	Pars plana vitrectomy
PT	Prothrombin time
PTSD	Post-traumatic stress disorder
PVM	Paravertebral muscle

PW	Posterior wall
RAT	The ankle jerk / ankle tendon reflex / the Achilles reflex
RBBB	Right bundle branch block
RBCs	Erythrocytes
RF	Rheumatoid factor
RV	Right ventricle
SC	Sine Correctione (Without Correction)
SNS	Somatic nervous system
TB	Tuberculosis
TBIL	Total bilirubin
TG	Thyroglobulin
TGL	Triglycerides
TIA	Transient Ischemic Attack
TOD	Right eye tension
TOS	Left eye tension
TVS	Trans Vaginal Sonogram
UA	Unstable angina
VOD	Visus oculi dextri (Vision right eye)
VOS	Visus oculi sinistri (Vision left eye)
VOU	Visus oculi utriusque (Vision both eyes)
WBCs	White blood cells / Leukocytes

Apart from diagnosing illness, diseases, naming body parts, syndromes, etc. in the elevated (medical) register or in a lower (colloquial) register, doctors/specialists also use the ICD (the International Statistical Classification of Diseases and Related Health Problems) codes. For example, doctors/specialists may write this particular diagnoses in three different ways: type 1 diabetes mellitus, type 1 diabetes, or E10. In B/C/S it may occur as diabetes tip 1, *šećerna bolest tip 1*, or once more as E10. Another example is cerebrovascular accident or cerebrovascular insult in the medical register or stroke or brain attack in the lower (colloquial) register. It is the same in B/C/S; there is *cerebrovaskularni inzult* (naturalized borrowing for the medical register) and *moždani udar* (a calque) or *moždana kap* for colloquial register.

Moreover, there are sometimes several abbreviations for the same term; e.g. a complete blood count (CBC) has the same meaning as full blood count (FBC), or full blood exam (FBE).

In English, some abbreviations are strictly in Latin like VOD (*Visus oculi dextri*, meaning vision right eye), and not 'VRE' as it would be in English.

Appendix 11 - List of common Latin phrases frequently used in doctors'/specialists' reports

This table contains Latin phrases commonly used in physicians'/specialists' reports to comment on diagnoses, treatment, and follow ups.

Latin	Meaning
Idem	The same
Nihil	Nothing
Per os (P.O.)	Oral administration
Sine morbo	Without a disease
Ut ante	As before

Appendix 12 - List of commonly used verbs in the doctors'/specialists' reports and some of their collocations

This table shows verbs commonly used in physicians'/specialists' reports and words that collocate¹² with them.

Verb	Collocates	
Apply		pressure (to the nose), (the eye) ointment, a cold/warm compress, etc.
Be	on	medication (for high blood pressure), dialysis, a diet, etc.
Contraindicate		medication, treatment, etc.
Dress		a wound
Extract (pull out)		a tooth
Have		(regular) checkups a follow up a headache a (high) temperature, etc.
Incise		the skin, the (deeper) tissues, etc.
Indicate		surgery, (physical) therapy, etc.
Prescribe		drug/medication/pill, a course of antibiotics, treatment, (a massage) therapy, etc.
Refer	a patient to	a specialist, a clinic, hospital, etc.
Receive		treatment, (radiation/oxygen, etc.) therapy
Relieve		pain, a/the symptom, a/the problem
Remove		a stitch/suture
See		your doctor/physician/a specialist

¹² A collocation is the 'lexical company' that a particular lexical item keeps. (Catford, 1965, p. 10)

Suffer	from	a disorder, a disease, (abdominal/chest) pain, etc.	
Take		pills, drugs/medication (one's) blood pressure (BP), (one's) temperature, etc.	
Treat		a patient, illness/disease, etc.	with PTSD
Undergo		surgery/operation, examination/test(s), transplant, treatment, etc.	

The three words very frequently used in physicians'/specialists' reports issued by physicians/specialists working in all the divisions of the Lukavac Health Center are anamnesis (medical history), follow-up, and checkup.

Anamnesis¹³ is a medical or psychiatric patient case history, particularly using the patient's recollections.

Follow-up¹⁴ is the process of monitoring the progress of a patient after a period of active treatment.

Checkup¹⁵ is a general medical examination that a doctor or dentist gives you to make sure you are healthy.

¹³ According to The Free Dictionary - <https://medical-dictionary.thefreedictionary.com/anamnesis>

¹⁴ According to The Free Dictionary - <https://medical-dictionary.thefreedictionary.com/followup>

¹⁵ According to Longman Dictionary of Contemporary English

Biography



Dean Ibrahimagić was born in Tuzla on September 16, 1970. He finished elementary and high school in Lukavac, where he still lives and works. He fell in love with and had the idea of studying the English language while he was working as an interpreter and an administrator in Lukavac with an American company called Brown & Root Services Corporation from 1996 through 1999. In the year 2000, he started studying English at Tuzla University Department of English Language and Literature. He first started working as a teacher in 2003, at Kreka elementary school in Tuzla, while he was a senior student. He earned his bachelor's degree in English from the University of Tuzla in 2004. The same year, he started working as an English teacher at Lukavac Electrical-Mechanical Engineering Vocational High School. He registered a self-employed business in 2005, according to the Decision made by the Tuzla Canton Ministry of Education, Science, Culture and Sports, and began providing General English Courses to young learners, adolescents, and adults. He was appointed as a certified (court) interpreter in 2006. In addition to working at the high school, he is constantly working on his professional development by translating all kinds of texts for natural and legal persons, as well as regularly attending seminars and webinars for English teachers. In 2017, he enrolled in a master's degree program in translation at the Department of English Language and Literature at Tuzla University.