Finding Equivalence in Medical Texts: A Contrastive Study

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ABSTRACT

Translation process is global knowledge process. Finding equivalences in order to have better comprehension in all of the texts, either scientific or unscientific, it needs to gain more knowledge and information on source language and target language. This study focuses on findings equivalences on some medical sentences especially on technical words which were not translated in Persian language as well. In the findings section the examples show that the translated technical words are completely different from the original concept and meanings of the target language. The data is from the book included the translated articles about the Anastasia. By considering and contrasting them from the medical Dictionary and having an interview with an informant specialist, we noticed that there are equivalences for these technical words but physicians prefer using the technical words among their professional office talk.

Key words: Translation, Equivalence, Medical Texts

ORIGINAL ARTICLE

PII: S232251221200002-1

INTRODUCTION

Many scholars believe that translation is the oldest activities which have done in the world. Through translation, in today's world, communication between different nations with different languages is feasible. Translation should be done purpose- built and a translator who is translating a text should find a good equivalence for his or her translation. She/he should know and should bear in his/her mind that a good translation should fulfill in the TL as the original did in the SL .Perhaps one of the most difficult problems that a translator is facing is how to find lexical equivalents for some text which are not known for the receptor.

In this paper we want to consider the translation of medical papers. Scholars such as Halverson (e.g. in The Concept of Equivalence in Scientific Text, 1997), Baker (e.g. in Other Words: a Course Book on Translation, 1992), and Roman Jacobson (e.g. in On Linguistic aspects of translation, 1959/2000), have proceeded it and **Ali Reza Sadeghi Ghadi** (The Importance of Finding Equivalence in Translation of Scientific Texts, 2007), an MA Student of Translation in Fars Science and Research University, Iran, is one of the researchers who recently published his essay. The previous studies show that finding equivalences from the source language to the target language in a scientific text in order to show the same meaning is not always an easy task. But before considering about the topic we should know at first what equivalence is. Equivalence is one of the most transitional and critical concepts in translational and critical concepts in translation theory, being considered by some constitutive for translation (Sadeghi Ghadi, 2007). It is also to be said that Equivalence has been considered the unique intertextual relation that only translations are expected to show: it is defined as the relationship between a source text and a target text that allows the TT to be considered as a translation of the ST in the first place.

As it was mentioned before, one of the most difficult problems for translator is to find an appropriate equivalent in SL texts which are not known for receptor in TL texts and maybe there are no suitable and available words and phrases for translation. By observing in some of the medical papers there are some problems in the translated medical texts. Most of the words in original text are translated as the same to the target text. It means that the translator couldn't find a good equivalence in his/her translation. Although in some of them there are some words which have the equivalences, the translators don't translate them and in others there are some words which have no equivalences so that the translators may explain the same words in feuilleton or have to use it in texts.

So the basic question is asked whether a translator can choose an appropriate equivalence in scientific texts, for example in medicine text, or not. Dose a translator can translate the concept of the original text with the suitable lexical equivalence to the receptors? Finally we want to know whether the translated text is comprehensible for the receptors or not.

Review of literature

The study of equivalence in translation shows how translators carry out text in translation from source language (SL) into target language or vice versa. Let us say some of the theoreticians' theories like Baker, Halverson and Roman Jacobson who have described the equivalence. Roman Jacobson had described in his paper, *on linguistic aspect of translation (1959/2000)* the problem of equivalence in meaning between words in different language. He points out (1959/2000:114):

"There is ordinarily no full equivalence between code-units." in his description he says *"substitute[ing] messages in one language not for separate code-units but for entire messages in some other language"*

Baker (1992) also believes that the choice of a suitable equivalent in a given context depends on a wide variety of factors such as linguistic and extra linguistic. She also mentioned that non - equivalence often poses difficulties for the translator in translation of terminologies of scientific texts. According to Halverson (1997), analogies between the equivalence concept and a concept of scientific knowledge as it is and has been studied with in the philosophy of science are highly informative in painting out the philosophical issues involved in equivalence, translation, and knowledge. He also believes that rather than dismissing the concept as ill-defined or imprecise, it is in the interest of the field of translation studies to consider the origins and manifestations of this 'imprecision' in order that we may be better informed and less inclined towards theoretical antagonism (Sadeghi Ghadi, 2007).

The main aim of this study is to show findings of equivalences in scientific and medical texts and also comparing the equivalence between two languages, English compared with Persian. At the first part of this article we will point to some structures which is involved a description of the study, methodology, including the data, data collection and data analyses procedures which is tried to show some of the sentences from the Articles of Iranian Congress of Anesthesiology Book published in 2008 in which they were translated by some translators. And the second part is covered the findings and finally the conclusion.

METHODOLOGY

Data and Data Collection Procedures

As it has been pointed out before, the data are a book of some translated medical papers about the anesthesia, published 2008 and a specialist informant who is a doctor (anesthesia specialist who got his degree from Shahid Beheshti University, Iran). The articles in the same textbook had been translated in Persian by some experts or non-experts' translators who were physicians. By simple random selecting and reading of 10 articles from the abstracts and the papers of that textbook of anesthesiology, the numbers of words were drawn up randomly. Then by reading the articles and its translation from translated articles, some sentences were chosen and some technical words of those sentences were considered. After the considering these technical words and also having an interview with the anesthesia specialist, we understood that those technical words were not translated as good as in target language (TL) texts.

Data analyses procedures

This paper focuses on the finding equivalences at lexical word in translation from English to Persian. In data analysis the frame work used is based on our results obtaining during the translation of different texts. If we want to find better equivalences that affect the quality of translation, we should perform comparative and contrastive analysis from English texts and their translations. As it was mentioned, some sentences are drawn up randomly. In this step the selected sentences compared with their equivalences in Persian.

RESULT

In this section of our paper, it is tried to show that sometimes these sentences were not translated completely and sometimes the translators did not transfer the concept of the original text. Occasionally the translators did not translate the words to the exact meaning in target language whereas there are many equivalences that translators could apply in their translations and it is better to say that the translators have added some sentences which were not in original texts.

The followings are some examples from these articles:

1- The patients <u>hemodynamic</u> remained <u>stable</u> throughout anesthesia, surgery and <u>recovery.</u>

در کل مدت بیهوشی ، جراحی و ریکاوری همودینامیک بیمار (stable) بود.

In this sentence, the terms <u>stable, hemodynamic and recovery</u> are used the same in translation whereas they could be translated according to the equivalences in Persian. The other case that is necessary to point out is the word **stable** is used as the same in translation with the English letter.

❖ ثابت ، بدون تغییر : stable

❖ hemodynamic : فشار خون
❖ recovery : بهبود

The propositional translation:

فشار خون بیمار در طول مدت بیهوشی ، جراحی و بهبودی ثابت بود.

2-<u>Epidural – Spinal anesthesia</u> is one of the modern methods which are used to establish adequate anesthesia in <u>cesarean section</u>.

بی حسی اپیدورال – اسپاینال یکی از روشهای جدیدی است که برای بی حسی کافی در اعمال جراحی به کار می رود.

Similar cases are done in second sentence as it is shown in previous sentence. Due to the fact that there is equivalence for the term Epidural – Spinal anesthesia, the translator did not use its equivalent. Meanwhile the author has emphasized in cesarean section but the translator has eliminated it and did not translate the word in his translation.

❖ Epidural- spinals : بی حسی نخاعی – کمری

The propositional translation:

<u>بی حسی نخاعی- کمری</u> یکی از روشهای جدیدی است که بی حسی را <u>درعمل سزارین</u> برای مدتی ثابت نگاه میدارد .

The third example shows:
3-He was conscious but <u>agitated</u> tachycardia, and hypertensive.

بیمار بیدار اما <u>آژیته</u> بود و فشار خون و ضربان قلب بالایی داشت.

In this case, translator used the word as the same in translated sentence. This technical term means:

❖ agitate : بیقرار

The propositional translation is:

بیمار بیدار اما <u>بیقرار</u> و فشار خون و ضربان قلبش بالا بود.

Another example:

4-<u>Trudy population</u> was including <u>pregnant females</u> who admitted to Rassol hospital to do an elective cesarean section.

<u>90 بیمار زن منطبق بر معیارهای ورود و خروج</u> که جهت انجام سزارین انتخابی به بیمارستان رسول ارجاع داده شده بودند <u>انتخاب و به طور تصادفی به سه گروه تقسیم شدند.</u>

The translation of this sentence is completely different. Some words such as Trudy population, pregnant females are not translated and the underling sentences translated, as we see, are not in original sentence. The terms Trudy population and pregnant female mean:

❖ Trudy population : کل مراجعین
❖ pregnant females : زنان باردار

The propositional translation:

<u>کل مراجعین</u> شامل <u>زنان بارداری</u> بودند که جهت انجام سزارین انتخابی به بیمارستان رسول ارجاع داده شدند.

Next example:
5-This is <u>a case series</u> study. We evaluated 12 patients multiple <u>trauma</u> with <u>sever hemorrhagic</u> shock. After obtained central or peripheral vein access, epinephrine infusion has begun and increase the epinephrine <u>dose</u> till <u>systolic</u> blood pressure reach to 90 mm/Hg or <u>appeared arrhythmia or tachycardia</u> and the same time dopamine renal infusion dose begun, anesthesia <u>induction</u> and <u>intubation</u> has done immediately with ketamine and muscle <u>relaxants,</u> maintained anesthesia with propofol opioeids and oxygen.

در این مطالعه که به صورت case series انجام شده است 12 بیمار به دنبال <u>ترومای</u> متعدد و شوک <u>هیپوولمیک</u> مورد بررسی قرار گرفتند.**بیماران با نارسایی قلبی ، بیماران ریوی ،سابقه حساسیت دارویی ، بیماری پیشرفته کبدی و کلیوی ، کانسر و زنان باردار در این مطالعه وارد نشدند** پس از برقراری راه وریدی مناسب محیطی و مرکزی ، <u>انفوزیون</u> اپی نفرین شروع شد و <u>دوز</u> ان تا رساندن فشار <u>سیستولیک</u> بالاتر از 90 میلیمتر جیوه افزایش داده شد.برای نگهداری بیهوشی از پروپوفول یا گازهای استنشاقی (ایزوفلوران) در مخلوط اکسیژن استفاده شد.

As we see there are some words and sentences which either are used as the same or did not translate. It seems that the translator read the original text and then he/she has translated the text what he/she understood from the text. On other words he/she transferred the concept of the text. In the first sentence the word <u>case series</u> is used as the same with the English letter, whereas there is equivalence for this word. There is a technical word which is called <u>systolic</u>. This word is not translated in medical text. By interviewing with an anesthesia specialists about this word we understood that there is not a specified meaning or equivalence for the systolic and it is always used the same between physicians. The doctor began to explain about the word. The explanation was described the bottom of the page.

There are also some words such as <u>trauma, sever, hemorrhagic, dose, and infusion</u> which are not translated. They can be translated according to the Persian equivalences:

❖ case study : چند سری نمونه
❖ trauma : ضربه
❖ sever: شدید
❖ hemorrhagic: کاهش حجم خون

To cite this paper: Sorayyaie Azar A and Moghimi Dehkordy A. 2012. Finding Equivalence in Medical Texts: A Contrastive Study. *Int. J. Appl. Ling. Stud.*, 1(1): 06-10.
Journal homepages: www.ijals.science-line.com

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❖ مقدار ، میزان : dose
❖ تزریق: infusion
دو نوع فشار خون وجود دارد فشار سیستولیک و فشار دیاستولیک . فشار سیستولیک عبارت است از فشار بالایی خون که آن را ماکزیمم هم میگویند ونقش آن تغذیه ی کل بدن است . فشار دیاستولیک یا همان مینیمم فشار پایینی خون است که نقش تغذیه قلب را برعهده دارد. لازم است به تذکر است که نباید این واژه ها را با فشار خون بالا و فشار خون پایین اشتباه گرفت و در آخر اینکه ترجمه ی فشار بالایی خون صحیح نیست و باید به همان صورت سیستولیک ترجمه شود:

The description of systolic

On the second line of this translation, there is an underlined sentence which is not in original text at all and it is not certain why the translation has brought this additional sentence in his/her translation. The forth sentences underling in original text are not translated in TL text and the translator eliminated it.

❖ نامنظم شدن ریتم قلب :arrhythmia
❖ تند شدن ضربان قلب : tachycardia
❖ برقراری عمل بیهوشی : induction
❖ لوله گذاری داخل نای برای تنفس مصنوعی : intubation

The propositional translation:

این تحقیق بر اساس چند سری نمونه انجام شد. 12 بیمار را که دچار ضربه های متعدد با شوک شدید کاهش حجم خون شده بودند مورد بررسی قرار دادیم. پس از برقراری راه وریدی مناسب محیطی و مرکزی ،تزریق اپی نفرین شروع شد . مقدار تزریق ان را تا انجایی افزایش دادیم که فشار سیستولیکی خون به 90 میلیمتر برسد یا نامنظمی در ریتم و ضربان تند قلب ظاهرشود . در همان زمان تزریق دوپامین کلیه آغاز شد ، بلافاصله بیهوشی و لوله گذاری در داخل نای با تزریق کتامین و شل کننده ی عضلات ایجاد گردید و برای پابت نگه داشتن بیهوشی از پروپوفول یا گازهای استنشاقی (ایزوفلوران) در مخلوط اکسیژن استفاده شد.

6-in this <u>Analytical Cross</u> section study, 180 subjects of educational hospitals <u>personnel</u> were included, their <u>demographic</u> and occupational information were recorded.

در این بررسی که یک مطالعه ی <u>Analytical – cross sectional</u> می باشد ، 180 نفر از <u>پرسنل</u> بیمارستانهای آموزشی وارد طرح شدند و اطلاعات <u>دموگرافیک</u> و سوابق کاری در پرسشنامه جمع آوری شد.

As we see the terms analytical cross, personnel and demographic weren't translated. These words can be translated:

❖ مطالعه ی مقطعی – تحلیلی: Analytical- cross
❖ کارمند : personnel
❖ جمعیت شناسی : demographic

The propositional translation:

در این بررسی که مطالعه ی مقطعی – تحلیلی است ، 180 نفر از کارمندان بیمارستانهای آموزشی را شامل می شد که در ان سوابق جمعیتی و اطلاعات کاری آنها ثبت شد.

7-one of the most important purposes in emergent ophthalmic anesthesia is prevention of gastric content <u>aspiration</u> and increase of intraocular pressure during endotracheal intubation.

یکی از اهداف بیهوشی بیماران اورژانس چشمی جلوگیری از <u>آسپیراسیون</u> محتویات معده و افزایش فشار داخل چشم هنگام لوله گذاری داخل تراشه می باشد.

The term aspiration means:

❖ وارد شدن محتویات معده به داخل ریه و لوله های تنفسی : aspiration

The propositional translation:

یکی از مهمترین اهداف در بیهوشی چشمی بیماران اورژانسی چشمی جلوگیری از وارد شدن محتویات معده و افزایش فشار داخل چشم حین لوله گذاری در داخل تراشه می باشد.

As it is shown in above examples the translator uses different strategies. Sometimes he/she used the translation by transliteration. Sometimes he/she added or deleted some sentences in and sometimes the translations were translated as free translation. In some of the articles we think that the translator has read the original text and then he/she has translated his/her inference. In other articles, sometimes he/she used translation by explanation, for example translation by footnote.\

CONCLUSION

There is no doubt that the most controversial and problematic issue in translation is the notion of equivalence. It is also said that the main aim of doing translation is an appropriate finding of translation equivalence and a translation should be purpose – build.

At the first part of this article, the meaning of equivalences was defined and then some of the scholars were introduced with their famous book. This work was continued by explaining different scholars' points of view toward equivalence like Jacobson, Halverson and Baker (in the review of literature section). Then the second part of this article, the methodology was started. The data was a book of some articles about anesthesia with their translation and also a doctor who was an anesthesia specialist. The third part was begun by choosing of 10 articles, reading them and then selecting of some technical words as examples. In a parallel direction with those processes the next part was started by interviewing of an anesthesia specialist and his guidance in order to find more appropriate equivalence for the medical texts.

By exposing of some examples from the medical text, we understand that although according to the Jacobson that he says there isn't full equivalence between two languages; sometimes there are equivalences between them as we see in those articles but the translators did not use the equivalences and they preferred to apply the original

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Journal homepages: www.ijals.science-line.com

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terms which are idiomatic between physicians. It is important to emphasize here that by interviewing with the anesthesia specialist, using the technical words is common at official hour talk among physicians. It means that there is some amendment in wording which is used between doctors. It shows the identity among specialist following social cultural factors in discourse community. But when a person who is not a physician reads this article, he/she cannot understand about the article. It means that he/she does not belong to this community.

It also should be mentioned that according to the findings it is impossible using some technical words in translation because these words have not exact meaning in target language and the translator have to bring the words itself in translation or explain the same word in the feuilleton. The explanation of these words are often time consuming so the translator prefer using the words as the same in original text.

In general the translations were acceptable for persons who are familiar with medical and the translator can transferred the concept of the text to the receptor but its perceptions for persons who don't know about medical were incomprehensible.

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APPENDIX

A comparison of hepatic enzymes Level among personnel of operation room and other therapeutic wards personnel (out of operation room) in hospital of Ardabil University of Medical Science. *10th Iranian Congress of Anesthesiology* (2008, 12).

Effect of sublingual nifedipine on IOP following endothracheal intubation after administration of succynilcholine. *10th Iranian Congress of Anesthesiology* (2008, 16).

Accidental Intrathecal Administration of Digoxin. *10th Iranian Congress of Anesthesiology* (2008, 18).

Evaluation of Maternal and Neonatal Effects of Adding Midazolam to Bupivacaine under Combined Spinal-Epidural Anesthesia in elective Cesarean Section. *10th Iranian Congress of Anesthesiology* (2008, 24).

Can first GCS be suitable Andex to admission in ICU.

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Background: Admission in ICU need exact and perfect teriage because life saving of everybody is the main goals of medical personnel on the other hand limitation in intensive care units to make some medical staffs decide to force so in this study we need response to this question that : can primary GCS be suitable Andex to triage of multiple patients?

Methods: Record of all patients were evaluated and necessary information were encoded in questionnaires, including cause of admission, initial GCS ,demographic information and patients ststus in discharge of ICU.

Results: 1) initial GCS in most patients was 3 -5 that can be because of incorrect determination of GCS or retard in referring of patients to ICU. 2) from 653 admitted cases ,306 cases (48.6%) had initial GCS = 3 -5 indicating failing of prehospital system. 3) 25.7% patients with initial GCS= 3-5 and 81.3 % of cases with initial GCS?5wre alive in discharge of ICU. 4) 45.2% of alive potions, had GCS = 15 and 67.4% had GCS?13 in discharge.

Conclusion: the most frequent cause of admission of patients in Mobasher hospital ICU, was MPT. 45.7% of cases were dead.54.3% of all patients and 81.3% of patients with initial GCS?5 were alive in discharge of ICU.

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Journal homepages: www.ijals.science-line.com

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