Identifying the Weaknesses in Medical Texts Encountered by Translation Students from English into Arabic: Problems and Solutions

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Abstract:

The purpose of this paper was to tackle the weaknesses of the undergraduate students when they were asked to translate medical texts from English into Arabic in the department of translation at Al-Iraqia University. The participants were asked to translate ten terms and nine sentences into Arabic taken from different authentic medical texts. They also were asked to use Hitti's Medical Dictionary, Marashi's Medical Dictionary and the Unified Medical Dictionaries as tool to help in their translations. Nida's (1964) strategies of translation were used in this research, and they were: addition, subtraction, alteration, formal equivalent and dynamic equivalent. Reading articles before starting the process of translation about the given assignment was essential. The researcher presented the source medical texts and the participants translations to thirteen instructors specialized in translation, English and Arabic languages to investigate and analyze their translations. The result of this study showed that mistranslations were attributed different factors including their insufficient knowledge about the strategies of translation, their application of insufficient mechanical tools of translation such as goggle translation and their weaknesses in English grammar. Therefore, it was recommended to teach medical text translation for four academic years at the department of translation in Al-Iraqia University.

Keywords: medical translation texts, bilingual medical dictionaries, strategies of translation.

تحديد مواطن الضعف لطلاب قسم الترجمة في النصوص الطبية من اللغة الانجليزية الى العربية: مشاكل و حلول

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المستخلص:

قام البحث يكتابة هذه الورقة البحثية لتتاول مواطن الضعف للطلاب في مواجهة النصوص الطبية من الانجليزية الى العربية في الجامعة العراقية. اذ طلب الباحث من المشتركون ترجمة عشرة من المصطلاحات وتسع جمل مسئلة من نصوص طبية موثوقة مستعينين بقاموس Hetti's و Medical Dictionary وMarashi's Medical Dictionary وUnified Medical Dictionaries لتعينهم في الترجمة. وتمت الاستعانة باسليب نايدا الا وهي الاضافة و الاستخلاص و التعديل و مبدئ التكافؤ الحدي و المرن. ومن الضروري مطالعة المقال قبل الشروع بالترجمة كشرط اساسي. عرضت الباحثة مصدر النصوص الطبية وترجمات المشاركين على ثلاثة عشر استاذا متخصصاً في الترجمة واللغات الإنجليزية والعربية للتحقيق في ترجماتهم وتحليلها. أظهرت نتيجة هذه الدراسة أن الترجمات الخاطئة تُعزى إلى عوامل مختلفة بما في ذلك عدم كفاية معرفتهم باستراتيجيات الترجمة ، وتطبيقها لأدوات ميكانيكية غير كافية للترجمة مثل ترجمة Google ونقاط ضعفها في قواعد اللغة الإنجليزية. لذلك أوصي بتدريس ترجمة النصوص الطبية لمدة أربع سنوات أكاديمية في قسم الترجمة في الجامعة العراقية.

الكلمات المفتاحية: نصوص الترجمة الطبية ، القواميس الطبية ثنائية اللغة ، استراتيجيات الترجمة.

1. Introduction

Far and wide, people need to communicate to each other to get to know others experiences, thoughts and their view of the world. To do that, they needed to use translation as a medium of communication. Needless to say that all countries around the world are aspire to arrive to the latest development of the new progress in the various fields of science and knowledge. For that reason, companies, institutions and universities have begun to use translation and use their various procedures and principles to reduce their mistakes. in brief, translation is an exercise that may contain the transmitting of meaning from the source language (SL) into the target language (TL). English and Arabic languages do not derive from the same system of communication. The translator, in general, aims to produce a text that has a similar communicative value to the target reader.

Medical translation texts are not easy to translate; they are complex and pose constant challenges on the translator to disseminate the new scientific discoveries throughout cultural barriers around the world. The famous American medical translator, Henry Fischbach, (1921 - 2008), was well known for noting that "medical translation may well be the most universal and oldest form of scientific translation because of the ubiquitousness of human anatomy and physiology (after all, the human body is much the same everywhere)." The need of medical translation is constant, as, since ancient times, scientists have focused on the human body to investigate common characteristics and hopefully find universal answers inherent problems that face human body. Medical translation has expended over the time.

Medical translation discourse plays a major role on people's existence. Thus, the medical translator has to develop special skills of both medical knowledge and expertise along with his or her general language competence. Failure to find the appropriate equivalent will have tragic consequences in the domain of medicine. Despite the fact that English language has been the lingua franca of the medical texts, however, Latin and Greek terminologies are still widely used in medical discourse.

Argeg, Garsa and Mousbah (2015:17) stated that "One of the most noteworthy issues in scientific translation is how to achieve the highest degree of precision possible in the use of words and to transfer the information contained in the source language text (SLT) into the target language text (TLT) without any loss of the original meaning."

1.1. The Problem of the Study

The problems of the current research paper were formulated as follows:
1- What types of translations were found in the translations of nine medical sentences?
2- What were the techniques and methods that the students relied on in translating the sentences? was it possible to identify the problems of translation faced by the undergraduate students?
3- What kind of solutions might be achieved by the undergraduate students?
4- To what extent did the current medical dictionaries help the translation process of a scientific- medical nature?

1.2. Objective of the Study

This research strived to attain the following objectives:

1- Describing the procedures of translation (dynamic, formal, alteration, subtractions and addition procedures) used by the students in translating the nine medical sentences.

2- Describing, discussing and analyzing the degree of attainability of meaning of the source sentences translated by using the above mentioned procedures by the students.

1.3. The Procedure of the Study

1- In this paper, the researcher utilized the descriptive- analytical method.

2- A test of nine medical sentences was used to test undergraduate students of translation, college of Arts at Al-Iraqia University which would contain medical texts as a tool in this research.

3- A questionnaire was sent to thirteen professors' experts in translation, Arabic and English languages as an analytical tool to verify and pinpoint the obstacles and recommendations needed in this study.

1.4. The Significance of the Study

Medical translation discourse is hugely neglected by the researcher. In Iraq, the medical sector use English as a tool of communication, so the patient in this case need a trustworthy translator to facilitate his/her journey at the hospital and, hopefully, help the doctors to provide him or her with the necessary care and treatment. The purpose of this study was to tackle the challenges of rendering medical translation texts encountered by the students and then gave recommendations for students and experts as well.

2. Literature Review
2.1. Scientific Translation

Translation is a bridge truly manifested since the bygone days to help people communicate freely and respectfully. Modern technologies would not be transferred without the existence of translation. Translator uses translation to translate all fields of language including technical and literary fields. In this research, the researcher focused on the translation of medical texts into

Arabic. Medical translation is known for its complexity; hence it stands in need of accuracy, knowledge and understanding of the message behind the texts.   In this regard, Al-manni (2000: 65) believed that "While the understanding of the source text terminology is an important factor in the process of translating, the coining of their target language counterparts is of equal, if not, greater importance."

Neologisms and non-equivalence are regarded as the most important problems in dealing with medical translation discourse. Therefore, specialists and terminologists often face tremendous challenges keeping pace with the new medical terminologies that enter, every day, in the language of science, which is often times English.

The most important factor the translator should regard in translating medical discourse is how to accomplish the utmost degree of precision and to render the message intended in the original text into the target text without any distortion of the original meaning.

2.2. Medical Translation

The scope of medicine field has, continually, been reviewed as critic by reason of noticeable fact that it is dealt with human beings' life. Civilizations throughout history established their own systems, some of them have managed to create an advanced system, and others have relied heavily on superstitious and religions. Fishback, on this subject, (1986:16) claimed that "Medical translation is the most universal and oldest field of scientific translation because of the homogenous ubiquity of the human body and the venerable history of medicine medical terminology." Medical discourse is not only seen in anatomy texts book, documents of medical devices …etc, but also can be found in fictional works. Regardless of the intended population for whom the medical discourse serves, its rendering of the original message should at all times show the content precisely.

The language of medical discourse is often regarded as simple, concise and straightforward; practically there is no room for extra interpretation or even deduction. Lee-Jahnke (1998) stated that "Translation requires more than exchanging terms or phrases in one language for another, adhering to the rules of grammar, and choosing the appropriate register,

because language is closely linked to subject-matter knowledge." In addition, Gadamer (1989) clarified "that the translator must have a full understanding of both the source and the target text, and of what the author intends to say and what the recipient needs to hear. In this sense, every translation is a sort of interpretation," and most evidently any minor mistranslations may exhibit significant practical results.

2.3. Medical Dictionaries

Medical discourse is changing rapidly because of the development, the new invasions and cures. The need for good dictionaries is unavoidable. There are plenty of medical tools that translator can use to overcome his or her obstacles such as: Medical dictionaries, medical notebooks, glossaries, books, encyclopedia, and medical search engines. Hartman (2004) stated that "the disciplines of translation and lexicography are linked to each other in 'give and take' operations." He concluded that translation is widely considered as the main provider for the bilingual medical dictionaries in terms of equivalents. Rigula and Calvi wrote "*Translation and lexicography: a necessary dialogue*" which was published in (2014) and they shared the same idea that in terms of dictionary building, lexicographers did not work well in the field of translation.

Translator often faces a lot of challenges when he or she is working on a text that belongs to language for specific purpose (LPS). In this regard, Hartmann (2001: 77) argued that "Little research has been done on dictionaries devoted to 'languages for special purposes', and even less on those that might cater to LSP learners." Unfortunately, the assessment of the quality and performance of the dictionaries on the basis of the agreed standard are rare.

Things must be taken into consideration when translating medical texts from English into Arabic, to begin with, the user of the medical dictionaries should improve their searching skills and therefore a user dictionary skill must be designed to meet the real needs of the translator in this field of expertise. Also, the issue of equivalence is existed for centuries and most of the dictionaries available are not satisfying the demands. In this line, Fatima and Rajai (2019) argued that "Most of the given equivalents are congruence, full equivalents, that they have a one to one correspondence to

the English words on the levels of semantic, pragmatic and the lexical one." Last but not least, the English-Arabic medical dictionaries are few and do not keep up with the rapid development in medical sphere the world is witnessing.

2.4. Untranslatability Problems

Untranslatability is widely considered as one of the most horrific factors that bother the specialists, professional translators and non-expert translators alike when they are dealing with LSP texts. These factors are related to culture and language in general. Deviation in translating medical texts occurs when the translator failed to find an equivalent for the medical terms existed in the text, depends on machine translation (automatic translation apps and sites) and relies on literal translation procedures. Strategies, procedures and methods of translation are the only hope for the translator. Also, reading articles about the subject matter can elevates the quality of the translation

2.5. The Role of Extensive Reading in Medical Translation

Jiren and Jianying (2018) conducted a study to investigate the role of extensive reading on the students and they concluded that "extensive reading has been continuously studied as a promising instructional method for improving students' language proficiency, including reading proficiency, vocabulary acquisition, and grammar awareness." Students in the translation department were required to read intensively about the subject before starting his or her process of translation. In this line, Palmer (1964:111) put some simple instructions for the translator to follow and said "take a text, study it line by line, referring at every moment to our dictionary and our grammar, comparing, analyzing, translating, and retaining every expression that it contains"

In order to reach perfection in translating medical texts, the translator is consistently pushed to create a glossary for each assignment to make his or her translation adequately possible for the future assignments. Biemiller (2005), in this regard, stated that "vocabulary will not guarantee success in

reading, just as learning to read words will not guarantee success in reading. However, lacking either adequate word identification skills or adequate vocabulary will ensure failure." Three English- Arabic medical dictionaries were recommended to be used by the translator: *Hitti's Medical Dictionary, Marashi's Medical Dictionary* and the *Unified Medical Dictionaries.*

3. Research Methodology
3.1. Method of Translating Medical Terminology

In this paper, the researcher adopted **three** procedures proposed by Nida: addition, subtraction and alteration. Molina & Albir, in their research entitled "Translation Techniques Revisited: A Dynamic and Functionalist Approach" (2002) argued that "These strategies are used to adjust the form of the message to the characteristics of the structure of the target language; to produce semantically equivalent structures; to generate appropriate stylistic equivalences; and/or to produce an equivalent communicative effect." The above mentioned strategies weere defined and exemplified along these lines:

- Addition: Nida (1964:227) put forward a series of different additions and states that "of the many types of addition which may legitimately be incorporated into a translation, the most common and important are:(a) filling out elliptical expressions; (b) obligatory specification; (c) additions required because of grammatical restructuring; (d) amplification from implicit to explicit status; (e) answers to rhetorical questions; (f) classifiers; (g) connectors; (h) categories of the receptor language which do not exist in the source language; and (i) doublets." Examples are as follows:

- Subtraction: in this regard, Nida (1964:231) asserted that "subtractions are neither so numerous nor varied as addition, they are, nevertheless, highly important in the process of adjustment. They include primarily the following types: (a) repetitions, (b) specification of reference, (c) conjunctions, (d) transitionals, (e) categories, (f) vocative, and (g) formulae."

- Alteration: Nida (1964: 233) pinpointed that "alterations can be treated under the following classes: (a) sounds, (b) categories, (c) word classes, (d) order of elements, (e) clause and sentence structure,

(f) semantic problem involving single words, and (g) semantic problems involving eccentric expressions."

Since identical equivalents were impossible to be found, the translator resorted to the possible closest equivalents. On this subject, Nida (1964:159) came up with two strategies of translation formal and dynamic equivalents.

- **Formal Equivalent**: it is literal translation. This strategy's objective is to stay close as much as possible to the original language. Furthermore, it goes with the assumption that the target reader is familiar with the cultural and linguistic aspect of the target text. The translator who adapts such strategy should preserve the grammatical aspects, vocabulary, lexical items and syntax of the original text. Nida (1964"195) stated that "the message I the receptor language should matches as closely as possible the different elements in the source language." The comparison between the source and the target cultures should be determined by their accuracy and correctness.

Anorexia nervosa is an illness that usually occurs in teenage girls, but it can also occur in teenage boys, and adult women and men.

فقدان الشّهية العصبي هو مرضٌ يَحْدثُ عادة عند البناتِ المراهقاتِ، لَكنَّه يُمْكِنُ أَنْ يَحْدثَ أيضاً عند الأولادِ المراهقينِ، وأيضا عند النِساء والرجال الراشدين.

Obviously, there were no mistakes in the translation above-mentioned, the translator, scrupulously, obeyed the rule of the formal equivalence strategy.

- **Dynamic Equivalent**: The main goal of this strategy is to focus on the target audience. In this sense, Nida (1964:195) argued that the main of this strategy is to maintain the "complete naturalness of expressions, and tries to relate the receptor to modes of behavior relevant within the contexts of his own culture."

People with anorexia feel safe, secure and comfortable with their illness.

الأشخاص الذين يعانون من مرض فقدان الشّهية يَشْعرونَ بالأمان والطمأنينة والراحة بمرضِهم.

The above mentioned example was translated perfectly and the target Arabic audience would have no problem since the language that had been used was

closer to his or her Arabic language. Moreover, using dynamic equivalent strategy was a very effective technique but, it should be used carefully.

All in all, the best way to achieve a perfect or nearly perfect translation is to use a blend of both strategies at the same time when it needed. The translator should, always, bear in mind the target reader of the target text and adapt the text accordingly.

3.2. Population of the Study

The present research paper consisted of two samples. The first sample included seventeen undergraduate students in department of translation from Al-Iraqia University. The subjects were very helpful. They were asked to translate nine medical sentences from English into Arabic. Their short period experiences with the translation of medical texts helped them a lot in their assignments. The second sample contained a questionnaire; thirteen professors specialized in translation and Arabic and English languages. They were asked to answer specific questions related to the medical texts translation. The answers of the students and the strategies adopted in the research were the main data of the questionnaire.

The purpose of using questionnaire was to investigate the validity of the students' responses. Also, it was used to tackle the problems the students encountered in translating medical texts, and hopefully checked whether the subjects benefited from the used of the five strategies of translation and the medical dictionaries they consulted in their rendering of the medical sentences.

3.3. Procedure of the Data Collection

The materials that had been used in this research paper were collected from different medical sources. Seventeen Students in the department of translation were asked to translate nine medical sentences from English into Arabic. The researcher designs a questionnaire to verify the validity and integrity of the subjects' responses. Furthermore, the outcomes presented a clear insight into the study of the translation of medical texts and enhanced the effect that this phenomenon values studying as an ambiguous field translation. All the sentences were analyzed in the light of three criteria:

1- Translate ten medical terms from English into Arabic.
2- Provide the correct Arabic translation of the nine medical sentences.
3- Assess errors and difficulties regarding the topic in hand.
4- Verify the type of procedures students employed in their translation.

4. Data Analysis and Discussion

This part of the research was considered as the most important part of this paper. it encapsulated the collected information about the current research. A list of ten terms was given to the participants to translate them into Arabic to investigate their knowledge about the medical field and then they were asked to translate nine medical sentences from English into Arabic. Their responses were gathered and investigated by thirteen professors' experts in translation, Arabic and English languages.

The underneath Table contained the terms which were listed in alphabetical order.

Table1: Percentages Results of the Translation of the Medical Terms

N.	Medical terms	Correct Answer	Percentage	Incorrect Answer	Percentage	Zero Translation	Percentage
1.	Acute	10	59 %	6	35 %	1	6 %
2.	Biopsy	15	71%	0	-	2	12 %
3.	Contusion	16	94 %	0	-	1	6 %
4.	Embolism	14	82 %	0	-	3	18 %
5.	epidermolysis bullosa	13	76 %	-	-	4	24 %
6.	ER	14	82 %	2	12 %	1	6 %
7.	HR	14	82 %	2	12 %	1	6 %
8.	Intravenous infusion	10	59 %	5	29 %	2	12 %
9.	Relapse	13	76 %	3	18 %	1	6 %
10.	Rx	11	65 %	5	29 %	1	6 %
Total		128		23		16	
Total Mean %		75 %		14%		9 %	

The table aforementioned demonstrates that the participants were adequately translated most of the medical terms into Arabic. The results were 75 % were correct answer, 14 % were incorrect answer and 16 % were zero translation.

In the following discussion, 39 % of incorrect and zero translation responses will be discussed to assess the difficulties related to each one of them.

The first term: **Acute**

The term was successfully translated by 10 participants with a percentage of 59 %, the following renderings were seen as correct answer: شديدة او حدة. This term is often used in the daily language that is the reason why 35 % of the subjects did not manage to find the equivalents for this term, and their translations were: ذكي و وجيز.

The second term: **Biopsy**

This term indicates a condition that begins unexpectedly and is sometimes severe, but the duration is short. Most of the students were able to translate Biopsy into its Arabic equivalent with a percentage of 71 % and their renderings were: خزعة او عينة Thus, two students did not translate the term into Arabic.

The third term: **Contusion**

Evidently, this term scored the highest correct responses of the participants with 94 %, their renderings were: كدمة او رضوض. Thus, two participants did not provide any answer. There is only one reason which would be behind this is their familiarity with the term contusion.

The fourth term: **Embolism**

82 % of the responses were correct renderings, and the translated the term into: الانسداد و الانصمام. the students managed to find the exact meaning of the term in Arabic due to their extensive medical terms program in the department of translation and this term have been translated earlier by them several times. Only 3 students did not provide an answer.

The fifth term: **Epidermolysis bullosa**

24 % of the responses were put in the zero translation category, the students were confused to give the right translation even though this compound term were given to them three times. Thirteen respondents with the index

percentage of 76 manage to give the exact meaning into Arabic, and their translations were: انحلال البشرة الفقاعي.

The sixth term: **ER**

This term was translated by fourteen participants in Arabic as: غرفة الطوارئ و وحدة الطوارئ, which was considered to be a correct answer. Clearly, two students did not provide the correct answers of the rem in Arabic, and their unacceptable translations were: غرفة المعيشة وغرفة الإنعاش. Moreover, one student did not translate the term at all.

The seventh term: **HR**

Regarding this term, 82 % of the responses were correct, and the students rendered it into Arabic as: معدل نبضات القلب. However, unacceptable translation of the term was found and it was: الموارد البشرية. Evidently, students used Google translation to find the correct answer. One participant did not provide an answer.

The eighth term: **Intravenous infusion**

Ten respondents from the total of seventeen students managed to give acceptable answers which were: تسريباً وريدياً وسائل وريدي. Thus, 29% of the participants provided incorrect answers of term in Arabic, and some of their translation were: تسريبا و سائل. In addition, two students did not give any answer.

The ninth term: **Relapse**

The term was successfully translated by thirteen students, and their correct translations were: الانتكاسة ورجوع المرض. However, three subjects did not provide acceptable translation of term in Arabic, and their translation were as follows: العودة والرجوع. One participant did not give any answer for the term in Arabic.

The tenth term: **Rx**

29 % of the responses translated the term in Arabic as: التقادم المسقط و مطلب, which was seen as incorrect translations. However, 65% of the participants

succeeded in providing the correct renderings of the term, and this was their answer: وصفة طبية.

The following tables illustrate the participants' translation and the remarks on each one of them.

Table 2: CPR is administered to patients who are unresponsive and not breathing or have abnormal breathing (ie. Agonal breathing) and no definitive pulse.

Sentenc e No.	Correct Translatio n	Percentag e	Incorrect Translatio n	Percentag e	Zero Translatio n	Percentag e
1.	7	41 %	9	53 %	1	6 %

Remarks:

To some extent, the participants managed to find the meaning of the terms exited in the sentence, yet 53 % of the responses came incorrect due to their spelling mistakes, failing to construct a sentence in the target language and not aware of the application of punctuation roles. The following were considered as incorrect translations and they were:

١- يتم إجراء الإنعاش القلبي الرئوي للمرضى الذين لا يستجيبون ولا يتنفسون أو لديهم تنفس غير طبيعي (مثل التنفس المتضيق) وليس لديهم نبض نهائي.

٢- يتم إجراء الإنعاش القلبي الرئوي للمرضى الذين لا يستجيبون ولا يتنفسون أو لديهم تنفس غير طبيعي (على سبيل المثال .التنفس الإحتضاري) ولا يوجد نبض محدد.

٣- هو اجراء إنعاش قلبي رئوي للمرضى الذين لا يستجيبون ولا يستطيعون التنفس وليس لديهم نبظ نهائيا.

Nevertheless, 7 respondents with a percentage of 41 managed to find the meaning intended in the original text, and this was there correct translation:

الانعاش القلبي الرئوي هي عملية تجرى على المرضى الذين لا يظهرون اي استجابة او لا يتنفسون نهائيا او بشكل صحيح (كضيق التنفس مثلا) او لا يوجد نبض لديهم.

Table 3: As the injury progresses, the whole cervical spine is finally hyper-extended.

Sentenc e No.	Correct Translatio n	Percentag e	Incorrect Translatio n	Percentag e	Zero Translatio n	Percentag e
2 .	10	59 %	6	35 %	1	6 %

Remarks:

Surprisingly, this sentence was successfully translated into Arabic by 64 % of the participants. The following renderings given by the students were considered as adequate translation, and they were:

- تتم عملية تمدد العامود الفقري العنقي كلياً كلما طال امد الإصابة.
- تتم عملية تمدد العامود الفقري العنقي بشكل كامل كلما تقدمت مدة الإصابة.

However, 35 % of the participants did not manage to find the meaning of the source text in Arabic and 6 % of the responses were blank. Perhaps, the two compound terms, cervical spine and hyper-extended, might confused them, and their incorrect translation were:

- مع تقدم الإصابة ، يكون العمود الفقري العنقي ذو الفتحة الواحدة ممدوداً بشكل مفرط .
- يتمدد العمود الفقري العنقي اخيرا بالكامل بسبب تقدم الاصابة.

Table 4: These reactions, which also occur in response to other vaccines, are potentially fatal.

Sentenc e No.	Correct Translatio n	Percentag e	Incorrect Translatio n	Percentag e	Zero Translatio n	Percentag e
3.	11	65 %	5	29 %	1	6 %

Remarks:

Some participants found it very difficult to translate this sentence into Arabic, 29 % of them failed to produce correct translations and 6 % of them did not translate it at all. Complex sentences always put a lot of pressure on the students. Relying heavily on machine translation websites may not be beneficial when dealing with this type of sentences. The following translations were considered as incorrect translation, and they were:

- قد تحدث، هذه تفاعلات عند الاستجابةً للقاحات أخرى، وقد تكون قاتلة.
- ردود الافعال الجانبية تحدث أيضًا بسبب الاثار الجانبية لاستجابةً للقاحات أخرى قد تؤدي الى الوفاة.

However, it was very easy for the rest of the participants to grasp the intended meaning of the sentence and to produce correct translations with 65 % of the responses were considered as acceptable translation, and thy were:

- قد تكون هذه التفاعلات قاتلة إذا صاحبتها تفاعلات ناجمة من لقاحات اخرى.

- هذه التفاعلات التي تحدث جراء الاستجابة للقاحات الاخرى، قد تكون مميتة.

Table 5: There it was - a clean fracture of the left clavicle.

Sentence No.	Correct Translation	Percentage	Incorrect Translation	Percentage	Zero Translation	Percentage
4.	6	35 %	10	59 %	1	6 %

Remarks:

Even though, this sentence is belonged to the simple sentences, 59 % of the responses were considered as incorrect translations due to their failure to find the meaning of the word (clean) and their wrongly construction of the sentence in Arabic, and their inacceptable renderings were:

- كان هناك – كسر نظيف في عضم الترقوة اليسرى.
- كسر الترقوة اليسرى.
- كان هنالك كسر بسيط في الترقوة اليسرى.

Table 5 shows that 6 participants managed to give the indented meaning of the source text in Arabic. The following are some renderings of correct translations which totaled 35 %:

- كان هناك كسر ظاهر في عظم الترقوة الايسر.

Table 6: A contusion may appear as a bruise beneath the skin or may appear only on imaging tests.

Sentence No.	Correct Translation	Percentage	Incorrect Translation	Percentage	Zero Translation	Percentage
5.	٨	47 %	٨	47 %	١	6 %

Remarks:

The aforementioned sentence was translated correctly by 47 % of the participants, and their acceptable renderings were:

- تظهر الكدمة على شكل رض تحت الجلد او لا تظهر الا من خلال الفحوصات التصويرية.

However, 47 % of the responses were considered as incorrect translations due to their spelling mistakes, failure to construct a sentence in Arabic and find

the exact equivalents of the terms in Arabic. Some of their translations were as follows:

- قد تظهر كدمة على شكل اصابة بل الانسجة الرخوة التي تكسر الشعيرات الدموية الموضوعية تحت الجلد او قد تظهر فقط خلال فحوصات التصوير.
- قد تظهر الكدمة على شكل كدمة تحت الجلد أو قد تظهر فقط في فحوصات التصوير.

Table 7: If someone has low blood pressure they should not use nitrites.

Sentence No.	Correct Translation	Percentage	Incorrect Translation	Percentage	Zero Translation	Percentage
6.	14	82 %	2	12 %	1	6 %

Remarks:

The above mentioned sentence was successfully translated into Arabic by 14 participants with a percentage of 82. The majority of the students managed to get the right meaning of the sentence in Arabic and these were some of their responses:

- إذا كان الشخص يعاني من انخفاض في ضغط الدم فلا يجب عليه أن يستخدم النتريت.
- يتوجب على الشخص الذي يعاني من انخفاض ضغط دم الامتناع عن تناول النترات.

Unfortunately, 12 % of the responses were considered as inacceptable translations and one of the participants did not translate the sentence into Arabic. The following translations were seen as incorrect translation and they were:

- لا يجب استخدام النترويت لمن يعاني من انخفاض في الدم.
- إذا كان الشخص يعاني من انخفاض في الدم فلا يجب أن يستخدم النتريت.

Table 8: Defibrillators are devices that send an electric pulse or shock to the heart to restore a normal heartbeat.

Sentence No.	Correct Translation	Percentage	Incorrect Translation	Percentage	Zero Translation	Percentage
7.	12	71 %	4	23 %	1	6 %

Remarks:

This sentence was translated correctly by 71 % of the responses, and the following were some of their acceptable translations:

- أجهزة تنظيم ضربات القلب هي أجهزة ترسل نبضات كهربائية أو صدمة للقلب لاستعادة نبضات القلب الطبيعية.
- أجهزة تنظيم ضربات القلب هي أجهزة تستخدم لأرسال صعقة كهربائية للقلب الاسترجاع نبضات القلب الطبيعية.

The aforementioned sentence was incorrectly rendered by 23 % of the responses. Moreover, it was a bit problematic as 6 % of the responses were blank. The following renderings given by the students were seen as incorrect, and they were:

- اجهزة تنظيم ضربات القلب هي اجهزه ترسل نبضات كهربائية او صدمة للقلب لاستعادة نبضات القلب الطبيعية.
- أجهزة تنظيم ضربات القلب عبارة عن أجهزة تساعد على استعادة نبضات القلب الطبيعية عن طريق ارسال نبضا بصورة كهربائية او صدمة من اجل تنظيم ضربات القلب.

Table 9: They fear abusive conservators will shut off life support to patients who would have chosen to live.

Sentence No.	Correct Translation	Percentage	Incorrect Translation	Percentage	Zero Translation	Percentage
8.	6	35 %	10	64 %	1	6 %

Remarks:

Obviously, the majority of the students failed to give the intended meaning in Arabic. Abusive conservators and life support were seen as problematic by them. Abusive was translated incorrectly into Arabic as (المشرفون المتعسفون). The students did not bother to look for the meaning of the word in the specialized dictionaries and linked it to the context of the sentence that was why 64 % of their responses were considered as incorrect translations. Their renderings were:

- إنهم يخشون أن يقوم المشرفون التعسفي بإيقاف أجهزة دعم الحياة عن المرضى الذين كانوا سيختارون العيش.
- انهم يخشون أن يقوم الأوصياء بأيقاف اجهزة دعم الحياة عن المرضى الذين اختاروا العيش.

However, 35 % of the answers were considered as acceptable renderings and the followings were some of their responses:

- هناك خشية من أن يوقف المسؤول الأجهزة التي تبث الحياة في أولئك المرضى وينهي حياتهم التي اختاروا المضي بها.
- ومما يخشى منه أن يوقف المسؤول عن الأجهزة التي تبث الحياة في أولئك المرضى وينهي حياتهم التي اختاروا المضي بها.

Table 10: He recorded that Miss Brown had undergone a biopsy in December 1974.

Sentenc e No.	Correct Translatio n	Percentag e	Incorrect Translatio n	Percentag e	Zero Translatio n	Percentag e
9 .	16	94 %	-	-	1	6 %

Remarks:

This sentence was considered the easiest one for the participants. They managed to translate it into Arabic, and their acceptable translations were as follows:

- دون ان الانسة براون قد خضعت لخزعة في شهر ديسمبر في عام ١٩٧٤.
- وسجل أن الآنسة براون قد خضعت لخزعة في ديسمبر ١٩٧٤.
- سجل ان الأنسة براون قد خضعت لخزعة (وهي عمليه اخذ قطعة صغيرة من النسيج الحي للفحص او التشخيص) في ديسمبر 1974

Table 11: Percentages Results of the Strategies Applied in translating the nine Medical sentences

Strategies Applied \ Sentence No.	subtraction	Addition	Alteration	Formal Equivalence	Dynamic Equivalence
.١	1	3	1	7	5
	6 %	18 %	6 %	41 %	29 %
.٢	1	-	3	10	3
	6 %	0 %	18 %	59 %	18 %
.٣	1	2	3	6	5
	6 %	12 %	18 %	35 %	29 %
.٤	1	2	4	8	2
	6 %	12 %	24 %	47 %	12 %
.٥	1	4	4	5	3

	6 %	24 %	24 %	29 %	18 %
٦.	1	1	1	5	8
	6 %	6 %	6 %	29 %	47 %
٧.	1	3	3	4	6
	6 %	18 %	18 %	24 %	35 %
٨.	1	1	3	9	3
	6 %	6 %	18 %	53 %	18 %
٩.	1	-	-	7	9
	6 %			41 %	53 %
Total Mean	6 %	10 %	14 %	41 %	29 %

As it can be shown in the table above, all the strategies proposed by Nida (1964) have been used by the respondents. Students excessively used Formal strategy when they translated the nine medical sentences from English into Arabic with a percentage of 41. Dynamic equivalence became the second with a percentage of 29. Subtraction, addition and alteration have not been used frequently by the subjects.

5. Conclusion

The purpose of this study was to investigate the weaknesses in the translation of the undergraduate students from English into Arabic. The tools provided to the students to help them translate the ten terms and the nine sentences were as follows: the five strategies that were proposed by of Nida (1964), reading articles in both Arabic and English to enrich their vocabulary, Hitti's Medical Dictionary, Marashi's Medical Dictionary and the Unified Medical Dictionaries asked to use Hitti's Medical Dictionary, Marashi's Medical Dictionary and the Unified Medical Dictionaries to find the right equivalents of certain terms.

The researcher and the experts in translation, English and Arabic languages reached the following findings and recommendations.

The findings:

- The translation of medical texts seemed to be a problematic for the undergraduate students of translation.

- Inexperienced undergraduate students showed weakness in providing the right translations and some of them did not even translate the given assignments.

- Reliable dictionaries from English into Arabic are rare. The majority of them are not keeping pace with the new terminologies presented in this field or they are not updated at all.

- Inconsistencies of the English Arabic dictionaries were found.

- Non-equivalence, neologism, abbreviations...etc. raised significant translation challenges.

- Complex sentences appeared to be a problematic for the participants.

The recommendations:

- Medical courses and method translations at the University of Al-Iraqia should be taught for four years to help the students widen their scope in medical translation.

- A committee of experts in translation should work on creating medical dictionaries from English into Arabic and vice versa.

- The students should be involved in intensive medical courses to train them to work in the medical field in the future.

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