Quality Assessment of Persian Translation of English Pharmaceutical Leaflets Based on House's Model

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ABSTRACT

This research attempted to evaluate the quality of Persian translation of drug leaflets. The researchers randomly selected a set of 30 pharmaceutical leaflets collected between March-August, 2015. The leaflets were analyzed based on House's functional-pragmatic model of translation quality assessment. At first, the profiles of both source texts and target texts were collected. Then, their overtly and covertly erroneous errors and the kinds of strategies used by the translators in translating the pharmaceutical leaflets into Persian were identified. The results indicate that out of 90 selected sentences of English leaflets, 47 were overtly erroneous and 43 were error-free. These overtly erroneous translations had 27 instances of "mistranslation", 15 instances of "grammatical mistakes", six instances of "addition", six instances of "omission" and four instances of "substitution". The only covert error was "tenor mismatch" in all sample sentences. The study findings can help teachers in translation studies to improve the quality of students' translation. Moreover, awareness of the errors in the current leaflet translations can assist students in performing their future jobs as translators. The findings may directly and indirectly affect the health of patients in an efficient and effective way.

1. Introduction

Translation is a complicated procedure which has a significant role in human life (Shahsavar & Naderi, 2015). A *qualified translator* should be able to find meaning in the source text and replace it with the target text accurately. A number of definitions of translation emerge from the literature. Some definitions are quite narrow; for example, Catford's (1965) defined translation as a "replacement of textual material in one language by

equivalent textual material in another language" (p. 20). Toury (1982) referred to translation as "any target language text which is presented or regarded as such within the target system itself, on whatever grounds" (p. 27).

Recently, there has been an increasing focus on the importance of Medical translation. It is a particular kind of technical translation that requires an exact translation and proofreading. An accurate medical translation may help medical translators to interpret and facilitate the communication process between patients and medical professionals while poor medical translation may lead to life-threatening situations for the patients (Heine, 2003). According to Arroyo (2007), a translation error may trigger severe clinical consequences. That is, any translation particularly leaflet information translation needs to be verified for possible translation errors. In a word, in medical texts, a translator should consider educational and professional background, levels of knowledge and experience, purposes and applications of information, linguistic abilities, familiarity with specialized terminologies, reading contexts, and broader cultural context (Resurreccio & Davis, 2007)

According to Jensen and Zethsen (2012), in the medical text, leaflet information is one of the main areas in translation. In many countries such as Canada, Germany, Iran, and the United States drug leaflets are usually provided along with drug products so that consumers can read, understand, and follow the instructions for effective and safe medication. To this end, drug leaflets must be written in a way to be easy to understand so that the users can easily follow the instructions. Since patient information leaflets are required to make a choice in

taking drugs, this information should be written in an understandable manner that help patients to know whether to take a specific drug or undergo a medical procedure. It should also help them to figure out if a drug is safe, effective, and appropriate to use.

Despite the importance of the quality assurance in translating drug leaflets, to our best of knowledge, there is no comprehensive research conducted to evaluate the Persian translation of pharmaceutical leaflets. To fill the gap, this study tries to evaluate the quality of Persian translation of English pharmaceutical leaflets based on House's (1997) model of translation quality assessment. It tries to analyze a set of translated leaflets by making a comparison between original leaflets and their Persian translations.

2. Drug Leaflets Translation

One of the most important sources of information about patients' medication is a drug leaflet. Pharmaceutical leaflets usually contain some information about drug ingredients of the drug, instructions about how to use drugs, their possible side effects of drugs, some special warnings, dosage of them, or caution and drug storage information. When drug leaflets are discussed in the framework of medical texts, their information delivery is important (Bjerrum & Foged, 2003). However, the incomplete or insufficient translation of pharmaceutical leaflets into target language may lead to the transfer of false information and cause significant health risk to patients. Incorrect translations affect the health and lives of drug consumers. When drug leaflets are discussed in the framework of the medical texts, the way of delivering information is important. This fact is reflected in some definitions of the drug in medical texts. For instance, Zargarzade and Law (2010)

defined prescription container label as available source of information if it is readable and understandable for patients. They studied verbal translation services of multilingual prescription labels in California. One of their conclusions is that nearly one-third of sampled pharmacies specifically in urban areas do not supply these services for Limited English proficient (LEP) patients, and these pharmacies supplied verbal translation services of multilingual prescription labels only when patients request.

Pedersen and Halliday (2009) argued that technical language, especially language of leaflets, should be simple and concise so that patients can understand how to take their drugs. They also mentioned that the younger generation is not the same as the older one in that the former is not used to reading leaflets but the latter is. Berghammer (2009) believed that accurate and readable instructions of drug or medical documents are as serious as sterilization. Other studies such as Aykol (2011) and Jensen (2011) confirmed translation problems or difficulties not only in medical translation but also in drug leaflet translation.

In another study, Alikhademi (2015) applied House's (1997) model to investigate the translation quality of the medical text in the Persian translation of the book entitled "Langman's Medical Embryology". The results revealed that covert translation was mainly applied in translation. In the same line, Shakernia (2014) attempted to find out whether the type of translation proposed by House (1997) is appropriate for the Persian translation of English short stories. She found that in translating short stories, covert translation was preferred to overt one because of being more straightforward.

Although some studies have been done on drug leaflets (e.g., Jensen , 2011; Karwacka, 2014; Ouliaei-Nia, Changiz, & Hosseini, 2008), most medical professionals lack adequate knowledge to translate drug leaflets and most studies do not consider problems in leaflet translations. There seems to be lack of research about the reason of unclear translations of drug leaflets. In spite of the richness of literature on using drugs, the assessment of drug leaflets has remained untouched so far. To fill the gap, this research attempts to evaluate the quality of Persian translations of English drug leaflets based on House's (1997) model. The specific research questions are as follows:

RQ1. Are there any possible errors in Persian translation of pharmaceutical leaflets from English into Persian?

RQ2. Do the translators apply covert or overt translation while translating English pharmaceutical leaflets into Persian?

3. Methodology
3.1 Design

This study tried to assess Persian translation of English pharmaceutical leaflets based on House's (1997) functional-pragmatic model of TQA. It benefited from content/document analysis design within qualitative approach. To this aim, a corpus-based comparative analysis approach was used in which the researchers compared English and Persian drug leaflets.

3.2 Materials

Materials used in this study consisted of 30 pharmaceutical leaflets issued between March-August, 2015 containing English and Persian texts. Due to time constraints, three sentences out of each leaflet were analyzed. In this research, parallel corpus was used to compare original English source texts and their Persian translation. We compared the

extracted sentences of leaflets with their Persian translations.

3.3 Instrument

In this study, House's (1997) model of TQA was used to evaluate the quality of Persian translations of English drug leaflets; the main reasons for selecting the model is that it well matched the purpose of our study. Also, it was popular among stakeholders in translation field.

House (1997) introduced overt and covert as two kinds of translation. Covert translation seems like an original text rather than translation. It is directly addressed to target language culture audience and needs cultural filter. It consists of business circulars, scientific texts, journalistic texts, advertisements, information booklets. According to House (1997), covert errors can be divided into different categories. "Field" refers to the nature of the social action which is taking place. It can be divided into two parts: subject matter and social actions. "Tenor" covers participant relationship including "author's provenance and stance", "social role relationship" and "social attitude". "Author's provenance and stance" refers to the relationship between the addresser and the addressees in terms of social power and social distance as well as personal view points. "Social role relationship" refers to analyzing the role relationship between addresser and the addressees which may be either symmetrical (marked by the existence of solidarity or quality) or asymmetrical (marked by the presence of some kind of authority). The last level of tenor is "social attitude" which reflects on the level of formal style in medical texts. This type of language is used in scientific medical places. "Mode" refers to the way we communicate and participate in the text. This participation could be simple or a kind of a monologue with no addressee that is

built into the text. "Genre" is the text type. For instance, it shows if a leaflet text is a medical text, using technical or clinical words. "Function" used to establish, maintain and signal relationships between people. For instance, the function of the leaflet text is an interpersonal; in a word, the author's intention is to give an effective information text about his personal knowledge and understanding. He wants to share and communize his personal experiences and his point of view with the medical world.

In an overt translation, the target translation audience is not directly addressed. It is closely similar to source language and culture which should be remained as intact as possible. Unlike covert translation, a translation is categorized as overt if the text reads like a translation rather than an original text. It includes political, literary, religious texts which may have different types of errors including mistranslation (i.e., the exact meaning of words or sentences of the source text are not conveyed appropriately in the target language), grammatical mistakes (i.e., the translated items violate the grammatical conventions of the target language), addition (i.e., the target text includes extra items more than the source text), omission (i.e., the obligatory item of the source text information is left out in the target text) and substitution (i.e., the lexical conventions of the target language are followed wrongly or even replacing a lexical word with another in a wrong way) (American Translators Associate, 2016).

3.5 Data Collection Procedures

Following the consultation with a statistician, the researchers selected a set of 30 pharmaceutical leaflets issued between March-August, 2015. The leaflets were randomly selected from the packages of drugs imported to Iran. Because of the

limited shelf life of pharmaceutical products, the researchers selected the leaflets out of available drugs which produced between 2012 -2015 upon the orders of Iranian drug importing from different companies and various countries. Based on the purpose of this study, those leaflets containing both original English and translated Persian texts were selected. Due to time constraints, only three sentences of each pharmaceutical leaflet were analyzed.

To analyze the collected data, 90 sentences out of 30 leaflets and their Persian translations were analyzed by the raters based on House's functional-pragmatic model. In this study, the raters were two expert translators (except the researchers) who were familiar with pharmaceutical texts. To ensure internal consistency between the raters, in case of any disagreement between the raters, they tried to discuss and reach an agreement on the quality of the translation. At first, the profiles of both source texts and target texts including the field, tenor, mode, genre, and function were collected. Then, their overtly and covertly erroneous errors and the kinds of strategies used by the translators in translating the pharmaceutical leaflets into Persian were identified based on the comparative analysis of the source and target texts using House's (1997) functional-pragmatic model of TQA.

4. Results

In this study, we tried to identify if there are any possible errors in Persian translation of pharmaceutical leaflets.

4.1 Identifying Covert Errors

The analyses of leaflets showed that the "field" of the source text was obviously "pharmaceutical" and the leaflets were "specifically" provided for relevant patients who used the drugs. For the "tenor", the leaflets were usually prepared by experienced "pharmacists" in a "formal" way in which the addresser (pharmacist) and the addressees had different social role relationship; therefore, their relationship was considered "asymmetrical". For the "mode", these leaflets were in "written" form and in most cases contain "simple" language as they target general population. As the leaflets used technical and clinical words in the general field of medicine, we labeled the "genre" as "medical". We determined the "function" of the text as "interpersonal" function as the author's intention was to give an effective information text about his personal knowledge and understanding.

The same analysis was envisioned for the target text profile with the only difference that in the target text the translator took the author's stance instead of the pharmacist. In this part, tenor mismatch was found in the comparison of the profiles of source and target texts. It was a case of the covertly erroneous errors found in analyzing pharmaceutical leaflets. This error type was seen in the mismatch between the author's provenance and that of the translator. In fact, the cases of the error type identified in this study were author's provenance as a pharmacist and translator's provenance as a translator.

4.2 Identifying Overt Errors

In this study, the most frequent overtly erroneous errors were mistranslation (47%), grammatical mistakes (26%), addition (10%), omission (10%) and substitution (7%). The results of the data analysis showed that out of 90 analyzed sentences, 47 were erroneous and 43 were error-free. In other words, no error was found in 48% of the sentences. In the 47 erroneous translations, 58 overt errors were found indicating that some translated sentences contained mixed errors (see Table 1).

Table 1: Frequencies and percentage of overt errors

Overtly errors	Frequency	Percentage (%)
Mistranslation	27	46.55
Grammatical mistakes	15	25.86
Addition	6	10.34
Omission	6	10.34
Substitution	4	6.90
Total	58	100

The following shows the analyses of different types of overtly erroneous errors and the related examples of each error in details. For more information on the full analyses of errors and suggested translations, readers are referred to Appendices A and B.

4.3 Examples of Different Types of Errors:

a) **Mistranslation**

Vitane: Children (over 1 year): 2 ml daily after meal or as directed by the physician.

ویتان : کودکان(بالای یکسال): روزانه ۱ میلی لیتر بعد غذا یا طبق تجویز پزشک

The dose is rendered wrongly and "2" is changed into "1", so" mistranslation". Vitane is multivitamin drops indicated to prevent vitamin deficiency conditions. If this amount of dose is taken, the course of treatment will be prolonged. The suggested Persian translation is as follows:

ویتان :کودکان (بالای یکسال) : روزانه ۲ میلی لیتر بعد از غذا یا طبق دستور پزشک

b) **Grammatical**

Cetirizine Hydrochloride Tablets: Apo-Cetirizine helps relieve your allergy symptoms by blocking your receptor sites before histamine binds there.

قرص‌ها ی سیتیریزین هیدروکلراید: آپو-ستیریزین با مسدود کردن محل گیرنده ها (رسپتورها) از پیوند هیستامین ها بدان جلوگیری کرده و موجب رفع علایم حساسیت می شود.

In this example, the Persian word is almost a countable noun, but the English one is not considered countable. Also,

"Histamine" is a substance which is rushed by human's body; causing itchy, watery eyes, sneezing and runny nose. By having enough knowledge in the medical context, it's clear that the form is not correct, although this translation does not cause much challenge, it is not well-formed within grammatical level. Hence, the suggested Persian translation is as follows:

قرص‌ها   ی سیتیریزین هیدروکلراید: آپوستیریزین با مسدود کردن محل های گیرنده از اتصال ماده هیستامین به آن جلوگیری کرده و به کاهش علائم حساسیت کمک می نماید.

c) **Addition**

Rowatinex: assists in the dissolution and expulsion of stones in the renal system.

رواتینکس : افزایش حلالیت و انهدام سنگ هایی با منشأ کلسیمی در کلیه و مجاری ادراری.

The word "با منشأ کلسیمی" which means "with calcium source" provides unnecessary and even wrong information. Because the sources of stones in the renal system are different, so sometimes the treatment plans may be different. The suggested Persian translation is as follows:

افزایش انحلال و دفع سنگ ها درسیستم کلیه رواتینکس : و مجاری ادراری.

d) **Omission**

Isotretinoin :Important: The medicine is teratogenic meaning, it may harm the fetus. Increased risk of miscarriage.

This warning has been omitted completely. Isotretinoin is indicated for the treatment of the severe forms of acne. Omitting such important information may threaten a pregnant woman's life. Its Persian translation is as follows:

ایزوترتینوئین: مهم : این دارو تراتوژن است، یعنی ممکن است به جنین آسیب برساند. هم چنین، افزایش خطر سقط جنین وجود دارد.

e) Substitution

Glycerol : Though, in some individuals, they may be prolonged for about 2 to 3 months or more.

گلیسرول: هرچند در برخی افراد ممکن است
ماههای خیلی زیادی به طول بیانجامد.

In this example, the phrase (2 to 3 months or more) is substituted with "ماههای خیلی زیادی" which means "many months". The perception of the reader maybe different from that of the writer as "2 to 3 months or more" is usually not equivalent to "many months". Hence, suggested Persian translation is as follows:

گلیسرول: هرچند در برخی افراد ممکن است
2 تا 3 ماه یا بیشتر طول بکشد.

f) Mixed errors

-The dosage of insulin and/or other blood sugar-lowering medicinal products must possibly be adjusted.

- مقدار مصرف انسولین و یا سایر محصولات
کاهنده خون ممکن است نیاز به تنظیم پیدا کند.

In this example, both "omission" and "grammatical mistakes" errors occurred. The phrase "blood sugar" was omitted in Persian translation. Also, "and/or" has been translated in a wrong order from grammatical view. The correct Persian translation is as follows:

مقدار مصرف انسولین "و/" یا" سایر
داروهای کاهش دهنده قند خون باید تنظیم شود.

Moreover, the results of descriptive statistics indicated that the overtly erroneous errors were more than the covertly erroneous errors and translators of pharmaceutical leaflets committed more overtly erroneous errors than covertly erroneous ones. On the whole, the result showed some cases of overtly erroneous errors (i.e., mistranslation, grammatical mistakes, addition, omission, substitution) and one case of covertly erroneous errors (i.e., tenor mismatch) in analyzing Persian translations of English pharmaceutical leaflets.

5. Discussion

In this study, we analyzed a set of translated leaflets by making a comparison between original leaflets and their Persian translations based on House' (1997) model. The results indicated that the overtly erroneous errors were more prevalent than the covertly erroneous errors. It means that the leaflet reads like a translation rather than an original text. The probable reason is that overtly erroneous errors seem like the original texts and do not smack of translation.

Another important finding is that translators used word-by-word, substitution, omission and addition strategies in their Persian translations of English pharmaceutical leaflets. Our results are similar to the previously reported findings of Alikhademi (2015) and Heidari-Tabrizi, Chalak, and Taherioun (2014) who investigated overt and covert errors on the Persian translations of "Langman's Medical Embryology" and "Orwell's Nineteen Eighty-Four", respectively.

In this study, in most cases, leaflets were contained simple language as they targeted general population, so patients can understand the text of the leaflets. This result was consistent with Pedersen and Halliday's (2009) study who believed that drug leaflets should be translated in a simple language without difficult terminology so that patients can understand how to take their drugs.

The findings of this study are applicable to educational settings in the sense that teachers in translation studies area can help learners as prospective translators to improve the quality of their translations through avoiding the common errors found in the analyzed texts. Moreover, the students of the translation studies become aware of the errors of current translations and this consciousness

leads them to better performance in their future job as translators. In addition, the results play a conscious-raising role in a broader sense. Practitioners in the field of translation studies and other related areas become aware of the current state of pharmaceutical leaflet translations and it may stimulate them to step into taking appropriate measures to promote the quality level of the current translations.

The results may be helpful for the following groups: First, it may help translators and readers to get familiar with the problems of drug leaflet translations such as introducing superfluous information, violating the conventions of the target language, literalness in case of using difficult medical terms. Second, it helps translators to minimize translation errors in the translation of pharmaceutical leaflets. Third, using adequate strategies in Persian translation of leaflets may help pharmaceutical companies in importing drugs into Iran. Fourth, it can assist doctors in writing prescriptions accurately. Finally, precise leaflet information may help patients and their families to be clear about the use and preservation of the drugs especially in using over the counter drugs for those patients who use directly without giving a prescription from healthcare professionals or doctors.

Limitations and Suggestions for further research

Like other studies, the present study has its own limitations. There are not many studies related to the problems of Persian translations of English drug leaflets. Hence, similar studies with a broader sample would be helpful to evaluate the quality of Persian translation of drug leaflets. In this study, due to time and practical limitations the researchers were faced with, just a set of 30 pharmaceutical leaflets was analyzed. Similar studies with a broader sample are required. In this study, we just assessed the quality of English to Persian text translation; it is not clear whether the assessment of the leaflets of other languages to Persian reaches the similar results. Another area in which the need for further research may feel is assessing the pharmaceutical leaflet translations based on other prominent models of TQA such as Waddington's (2001) model. Last but not least, this study focused on analyzing the pharmaceutical leaflets translation, other studies may investigate the quality of English to Persian translation of medical books, journal articles, advertisements, or drug labels.

6. Conclusion

This research attempted to evaluate the quality of Persian translations of drug leaflets based on House's functional-pragmatic model. The overtly erroneous errors were more prevalent than the covertly erroneous errors. The study findings can help teachers in translation studies to improve the quality of their translation. Moreover, awareness of the errors of current leaflet translations can assist students in performing their future jobs as translators. It may provide a better understanding of the problems of drug leaflet translation. The findings may directly and indirectly affect the health patients.

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Appendices

Appendix A
Overt errors and suggested translations in the leaflets

A: Mistranslation errors and suggested translations

#	Source text	Target text translation	Suggested translation
1	SSRI (selective serotonin re-uptake inhibitors)	SSRI (مهارکننده های جذب مجدد سروتونین)	SSRI (مهارکننده های برداشت مجدد سروتونین)
2	In severe infections, dosage may be increased to as much as two drops every hour	در موارد عفونت شدید، ۱ قطره هر ساعت یا بر حسب دستور پزشک می باشد.	در موارد عفونت شدید، دو قطره هر ساعت یا بر حسب دستور پزشک می باشد.
3	In case of persistent headache, nausea, vomit and blurred vision or severe (hemorrhagic) diarrhea, please discontinue treatment immediately.	در موارد بروز سردرد، تهوع، استفراغ، اسهال، اختلال بینایی، خونریزی شدید، سریعا مصرف دارو را قطع کرده.	در موارد بروز سردرد، تهوع، استفراغ، اسهال، اسهال خونی شدید، سریعا مصرف دارو را قطع کنید.
4	The above conditions also concern women who have amenorrhea.	شرایط بالا شامل بیمارانی که آمنوره داشته نیز می شود.	شرایط بالا شامل بیمارانی که قاعدگی شان متوقف شده است نیز می شود.
5	Children (over 1 year): 2 ml daily after meal or as directed by the physician.	کودکان (بالای یکسال): روزانه ۱ میلی لیتر بعد غذا یا طبق تجویز پزشک.	کودکان بالای یکسال : روزانه ۲ میلی لیتر بعد از غذا یا طبق دستور پزشک.
6	You are using contraception even if you have no menses at the moment.	باید روش جلوگیری از بارداری را حتی اگر در زمان شروع درمان دچار خونریزی هستید بکار گیرید.	باید روش جلوگیری از بارداری را حتی اگر در زمان شروع درمان دچار خونریزی نیستید بکار گیرید.
7	This loss in fluids could cause kidney problems which means you will be at risk of developing over acidification.	این شکل از دست دادن آب می تواند موجب مشکلات کلیوی گردد و بیمار را در خطر ایجاد اسیدوز شدید قرار دهد.	این از دست رفتن آب بدن می تواند موجب مشکلات کلیوی گردد و بیمار را در معرض خطر گسترش شدید اسیدی شدن خون قرار دهد.
8	All materials that have been utilized for dilution and administration should be disposed of according to standard procedures.	تمام موادی که برای رقیق سازی و تجویز دارو استفاده شده اند باید مطابق روشهای استاندارد نابود شوند.	تمام موادی که برای رقیق سازی و تجویز دارو استفاده شده اند باید مطابق روشهای استاندارد دور ریخته شوند.

B: Grammatical errors and suggested translations

#	Source text	Target text translation	Suggested translation
1	The recommended dose is ½ film-coated tablet of Citalopram HEXAL 20 mg once a day.	مقدار مصرف توصیه شده نصف قرص روکشدار سیتالوپرام هگزال ۲۰ میلی گرم یک بار در روز می باشد.	مقدار مصرف توصیه شده برای قرص روکشدار سیتالوپرام نصف قرص هگزال ۲۰ میلی گرم یک بار در روز می باشد.
2	How is Citalopram HEXAL 20 mg to be stored?	چگونگی نگهداری سیتالوپرام هگزال ۲۰ میلی گرم.	طرز نگهداری سیتالوپرام هگزال ۲۰ میلی گرم چیست؟
3	The occurrence, in rare cases, of unexpected severe side effects during treatment with 5-FU has been attributed to reduced DPD activity.	اثرات جانبی شدید و غیرمترقبه در موارد کمیاب در طی درمان با 5-FU به کاهش فعالیت DPD نسبت داده می شود.	اثرات نادر، اثرات جانبی شدید و غیرمنتظره در طی درمان با 5-FUیه کاهش فعالیت DPD نسبت داده می شود.
4	Gastrointestinal bleeding	خونریزی دستگاه گوارشی	خونریزی دستگاه گوارش
5	Apo-Cetirizine helps relieve your allergy symptoms by blocking your receptor sites before histamine binds there.	آپو- ستیریزین با مسدود کردن محل گیرنده ها (رسپتورها) با پیوند هیستامین ها باعث جلوگیری کرده و موجب رفع علائم حساسیت می شود.	آپوستیریزین با مسدود کردن محل های گیرنده از اتصال بدان آن جلوگیری کرده و به کاهش علائم حساسیت کمک می نماید.
6	You may experience one or several of these symptoms, be sure to inform your doctor if you do.	ممکن است پزشک خود را مطلع سازید در صورتی که یک یا چندین از این عوارض گفته شده را تجربه کنید.	در صورت بروز یک یا چند مورد از عائم ذکر شده، حتما به پزشک خود اطلاع دهید.
7	Tell them immediately if you notice any of these effects.	چنانچه متوجه تغییرات یادشده گردید بلافاصله به آنها اطلاع دهید.	اگر متوجه هر یک از این علائم شدید، فورا به آنها اطلاع دهید.

C: Addition errors and suggested translations in the leaflets

#	Source text	Target text translation	Suggested translation
1	Liver and kidney failure	نارسایی کبدی و کلیوی	نارسایی کبدی و کلیوی
2	Assists in the dissolution and expulsion of stones in the renal system.	افزایش حلالیت و انهدام سنگ هایی با منشا کلسیمی در کلیه و مجاری ادراری.	افزایش انحلال و دفع سنگ ها درسیستم کلیه و مجاری ادراری.
3	Keep drug out of children's reach.	دارا بطری را به خوبی ببندید و دور از دسترس کودکان نگهداری نمایید.	دارو را دور از دسترس کودکان نگاهدارید.

D: Omission errors and suggested translations in the leaflets

#	Source text	Target text translation	Suggested translation
1	The medicine is teratogenic meaning; it may harm the fetus. Increased risk of miscarriage.	---------------------	این دارو تراتوژن است، یعنی ممکن است به جنین آسیب برساند هم چنین، افزایش خطر سقط جنین وجود دارد.
2	Glycerol may cause headache, stomach upset and diarrhea.	گلیسرول ممکن است باعث سردرد، ناراحتی گوارش و اسهال شود.	گلیسرول ممکن است باعث سردرد، ناراحتی گوارش و اسهال شود.
3	Keep this leaflet, you may need it again.	---------------------	این بروشور را نزد خود نگهدارید ممکن است دوباره به آن نیاز پیداکنید.

E: Substitution errors and suggested translations in the leaflets

#	Suggested translation	Suggested translation	Suggested translation
1	Abrupt termination of longer-term high-dosed treatment with Doneurin 25 film-coated tablets should be avoided.	اگر مدت طولانی از این دارو با دوز بالا مصرف می کنید از قطع ناگهانی آن بپرهیزید.	اگر مدت طولانی از قرص روکشدار دونورین ۲۵ با دوز بالا مصرف می کنید از قطع ناگهانی آن بپرهیزید.

Appendix B

F: Mixed errors and suggested translations in the leaflets

#	Source text	Target text translation	Error type(s)	Suggested translation
1	The dosage of insulin and/or other blood sugar-lowering medicinal products must possibly be adjusted.	مقدار مصرف انسولین و یا سایر محصولات کاهنده خون ممکن است نیاز به تنظیم پیدا کند.	Omission Grammatical mistakes	مقدار مصرف انسولین "و" یا سایر داروهای کاهش دهنده قندخون باید تنظیم شود.
2	During concomitant administration of lithium and sertraline HEXAL 100 mg, patients should be appropriately monitored by the doctor, as interactions cannot be excluded.	درحین تجویز همزمان لیتیوم و سرترالین ۱۰۰ میلی گرم، به دلیل عدم امکان رد بودن داشتن، احتمال آن متقابل داده می شود بیمار باید توسط پزشک به درستی کنترل شود.	Mistranslation Addition	به دلیل احتمال بروز تداخلات دارویی، درحین مصرف همزمان لیتیوم و سرترالین هگزال ۱۰۰ میلی گرم، بیماران باید به شکل مناسبی تحت نظارت پزشک باشند.
3	Protection of the urinary tract with UROMITEXAN should therefore only be undertaken in such patients following careful risk-benefit analysis and under medical supervision.	از این رو تجویز یورومیتکسان در اینگونه بیماران باید پس از تحلیل دقیق سود و زیان انجام گیرد.	Mistranslation Omission	از این رو در اینگونه بیماران یورومیتکسان باید پس از تجزیه و تحلیل دقیق مزایا و خطرات آن و تحت نظارت پزشکی تجویز شود.
4	Elderly patients can have a more sensitive reaction to antidepressants.	سالمندان می توانند نسبت به واکنش به ضدافسردگی ها حساس تر باشند.	Grammatical mistakes, Omission	بیماران سالمند ممکن است نسبت به واکنش به ضدافسردگی ها حساس تر باشند.
5	Though, in some individuals they may be prolonged (2 to 3 months or more).	هرچند در تعدادی از بیماران ممکن است ماهیت خفیف زیادی به طول بیانجامد.	Mistranslation Substitution	هرچند در برخی افراد ممکن است ۲ تا ۳ ماه یا بیشتر طول بکشد.
6	This medicine should not be used after the expiry date shown on the pack.	این دارو نباید بعد از گذشت تاریخ انقضای درج شده بر روی بسته بندی آن مصرف شود.	Addition Grammatical mistakes	این دارو نباید بعد از تاریخ انقضای درج شده روی جعبه مصرف شود.
7	A severe liver or kidney disease	اختلالات شدید کبد یا کلیه	Grammatical mistakes Substitution	بیماری شدید کلیوی یا کبدی
8	The oligo elements have a favorable action on the metabolic functions particularly also on the cells of the cardiac muscles.	عناصر کمیاب دارای اثرات مطلوبی برروی اعمال متابولیکی بخصوص سلولهای عضلانی قلب دارد.	Grammatical mistakes Mistranslation	عناصر کمیاب بر عملکرد سوخت و ساز بدن خصوصا سلولهای عضلات قلب تاثیر مطلوبی دارند.
9	Metformin HEXAL is used if the blood sugar concentrations can't be adequately controlled by diet and exercise alone.	متفورمین در صورتی که غلظت قندخون به اندازه کافی و به تنهایی بوسیله رژیم غذایی و ورزش قابل کنترل نیست تجویز می گردد.	Mistranslation Grammatical mistakes	متفورمین هگزال در مواردی مورد استفاده قرار می گیرد که غلظت قندخون را نمی توان فقط از طریق رژیم غذایی و ورزش بخوبی کنترل کرد
10	Do not use the tablet after the expiry date which is stated on the label and cartoon.	از مصرف دارو پس از گذشت تاریخ انقضای درج شده روی برچسب و جعبه خودداری فرمایید.	Grammatical mistakes Addition Substitution	از مصرف قرص پس از تاریخ انقضای درج شده روی برچسب و جعبه خودداری فرمایید.