INTRODUCTION

Larson (1986, p. 3) is of the opinion that translation is basically the "transferring the meaning" of a piece of the written or spoken source text (ST) in a source language (SL) into a target text (TT) using a target language (TL). Obviously, the transfer of meaning here involves the transformation of forms (i.e., words, phrases, clauses, sentences, or paragraphs) from ST to TT which may also require certain modifications or substitutions. Similarly, Bell (1991) believes that translation is the "replacement" of a text in one language into another language which focuses on the preservation of meaning equivalence and style. Thus, it is clear that a translator must always focus not only on transferring the message of a ST as accurately as possible to a TT but also transferring the style as closely as possible depending on the types of texts, the fields (the topics), and the translation brief.

Naturally, translation is used in many fields including the medical field. Medical translation focuses on medical language which is different from the everyday language mainly because in medical language there are many medical terminologies that need to be transferred professionally and carefully (Yaseen, 2013, p.1). This is in line with Newmark (1988, pp. 151-152) who categorizes medical translation under the technical translation and highlights the difficulties in translating the terminologies, including medical terminology. The terminology itself can be defined as a set of terms that are appropriate to a particular language and as an important instrument for better understanding a particular language belonging to a particular group (Desmet, 2021).

In the Indonesian context, medical translation has been conducted to translate specialized medical texts (such as textbooks, drug-package inserts or DPIs, articles in scientific journals, etc.) or non-specialized medical texts (i.e., brochures, articles in newspapers and popular magazines, etc.). Thus, translators should be familiar with medical texts and their terminology. The more they are familiar with medical texts, the easier it is for them to finish their work. This corresponds to Wahyuningsih (2011) that suggests translators must be careful in reading various texts, and their exposure to various text types can really help them to read a ST and translate it to a TT well. Furthermore, for many countries in the world, medical translation is significant because it has been applied as the means to distribute new knowledge and discoveries as well as to share the best practices in the medical field throughout the world. Furthermore, medical translation is crucial in providing professional healthcare services for foreigners or minorities in many countries (Ageicheva & Rozhenko, 2019).

The medical translation covers a very wide range of areas such as pharmacology, medical rescue systems, surgery, acupuncture, and other specialization fields, as well as medical laws and administrative procedures. In this article, the focus is on the translation of medical terminology in the acupuncture area. In the actual practices, translators of medical texts often find difficulties in translating medical terminologies. To cope with this, translation experts like Newmark (1988) following Vinay and Darbelnet (1958/1995) offer certain procedures (or rather 'techniques' or 'strategies') that can be used in translating sentences, phrases, or words, including terminologies.

The translation procedures may include techniques such as literal translation, transference, naturalization, cultural equivalent, shifts or transpositions, modulation, couplet, notes, and others (Newmark, 1988). Many studies have been conducted on how translators use certain procedures to achieve the 'proper' equivalence. Within the translation of medical terminology, there are at least four previous studies that can be highlighted here. The first one is a study by Montalt, Zethsen, & Karwacka (2018) that puts an emphasis on how the proper use of medical terms becomes the determinant of successful communication in healthcare communities worldwide because translation can help in creating and controlling standardized medical terminologies. This notion naturally can be applied in the translation of acupuncture terms from English into Indonesian, which is the main concern of this article.

The second and the third study are those of Widyawati (2015) and Poluakan, Pamantung, & Rambing (2019) that study terminology in the Indonesian context. Both have some similarities and differences. Widarwati (2015) and Poluakan et al., (2019) have similar objects of study. They used medical books for their research in medical terminology. However, they had different purposes and used different methods in analyzing their data. Widarwati (2015) aims at compiling a taxonomy as well as identifying and describing the translation techniques used in the translation of medical terms in a medical book that has already been published in English (ST) and in Indonesian (TT). She also wants to explain the relations between the techniques and the quality of the TT, particularly the terminology. On the other hand, Poluakan et al. (2019) are aiming at finding out the types of Indonesian loanwords and changes of meanings that can be found in those loan words.

They focused on the Indonesian medical terms and used two medical books as the sources of the loan word data. Some loan words have accurate meaning, while some others have certain changes in the meaning although they are still acceptable.

The fourth study is an article by Jayantini, Yadnya, Suparwa, & Puspani (2017). They focus on how medical terms are translated from an English medical text-book into its Indonesian translation by applying phonological translation and spelling adjustments procedure to translate the ST medical terms into a TT. Furthermore, Jayantini et al. (2017) conclude that pronunciation adjustments (phonological translation) and spelling adjustments are often used in the translation of medical terms from English into Indonesian.

This present study is in line with those four previous studies as it also focuses on the translation of medical terminology. However, it took a slightly different path by analyzing the medical terminology used in an article about acupuncture written by Kamiya et al. (2021) entitled Safety of Yamamoto New Scalp Acupuncture in Healthy Subjects and the Relationship Between Shoulder Stiffness, Diagnosis Points, and Stimulation Points (henceforth 'YNSA article') which has been translated from English to Indonesian. Knowing that medical terminologies should be (relatively) uniform throughout the world, the aim of this study is to investigate the types of procedure used by a translator in such ways that the terminologies in the TT are equivalent to those in the ST. The medical terminologies are categorized by using Cohen & DePetris' categorization (2014) before they are analyzed to determine the translation procedures used by the translator by using Newmark's procedure (1988).

Yamamoto New Scalp Acupuncture (YNSA)

Originating from Japan, one of the popular medical acupuncture techniques in the past two decades is Yamamoto New Scalp Acupuncture (YNSA) which has been performed worldwide, especially in Europe. In 1973, a neurologist, Dr. Toshikatsu Yamamoto, created YNSA as an acupuncture microsystem for which needles are inserted into somatotopic areas on the scalp for the treatment of several symptoms and reactions of the diagnosis and stimulation points (Kamiya et al., 2021).

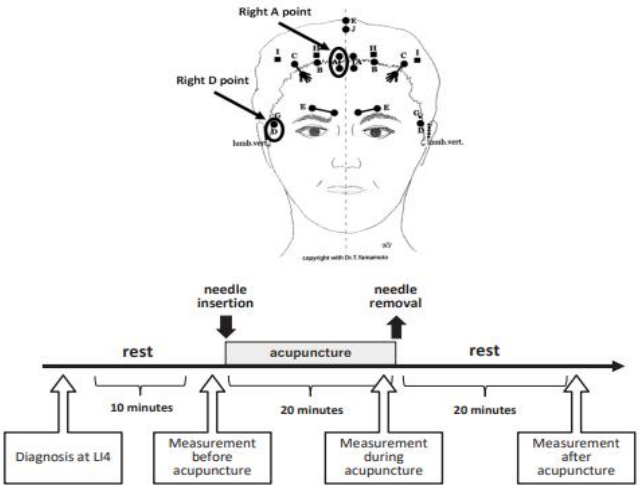

Figure 1. Locations of stimulation points A and D (Kamiya et al., 2021)

Thus, the YNSA system is also based on somatotopic representation which is different from TCM; moreover, YNSA is claimed to be more effective than TCM as it can immediately reduce pain in the locomotor system and in neurological diseases (Kao & Yang, 2020).

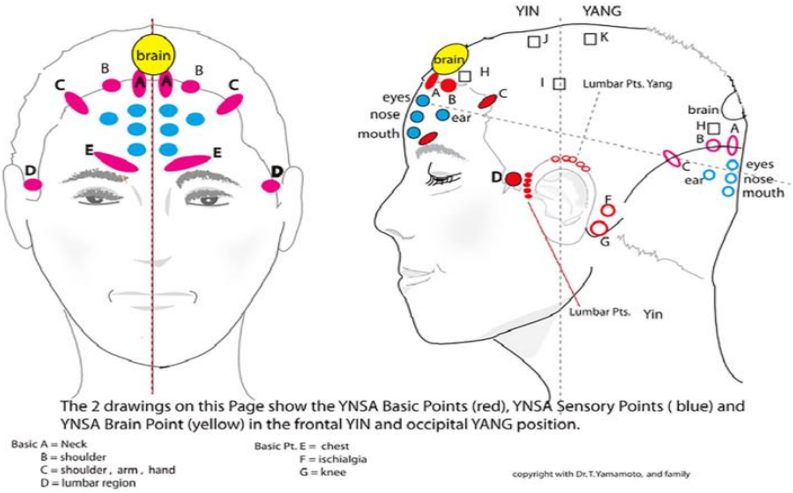

Figure 2. Yamamoto New Scalp Acupuncture, Somatotopic area
Kao & Yang (2020)

Medical terminologies consist of unique words and expressions which are used by healthcare professionals in order to guarantee effective and accurate communication. Almost all medical terminologies are derived from Greek and Latin words, so they are efficient, consistent, and uniform to be used all over the world. Although medical terminologies, including those of acupuncture, seem to be rigid, they are actually changeable due to medical discoveries which makes medical specialists and therapists have more understanding of pathological symptoms that they can use to treat their patients (Desmet, 2021). The fact that medical terminologies are mainly in English makes the translation of those terminologies to various languages, including Indonesian is crucial. Thus, the translators are required to have a knowledge of linguistics, at least morphology and phonology for word derivations, in order to produce a good translation of terminologies in a medical text (Cohen & Depetris, 2014).

Medical Terminology Concepts

Cohen & Depetris (2014) agree that medical science always evolves, and their special vocabulary or medical terminologies have always changed along with the new findings in methods of diagnosis and treatment as well as the advancement of medical technologies. Cohen & Depetris (2014) suggest that learning medical terminology can be done in 5 stages which can be summarized in the following section.

1. By the word components

   Almost all medical terms can be divided into three components: roots, suffixes, and prefixes, all of which can help people understand the meaning of a particular term (Cohen & Depetris, 2014).

2. Diseases

   The next stage is the understanding of the types of diseases. A disease can be defined as any disorder of normal body function, and diseases can be grouped into distinctive categories which often have some overlaps. The name of a disease is usually based on the symptoms. Cohen & Depetris (2014) put diseases into seven categories: infectious diseases, degenerative diseases, neoplasia, immune disorders, metabolic disorders, hormonal disorders, as well as mental and emotional disorders.

3. Diagnosis

   Medical diagnosis is used to determine the characteristics and causes of an illness. When diagnosing patients, healthcare professionals do two things. First, they gather information regarding the symptoms of the present illness, the patients' past medical history, and social contacts.

Second, healthcare professionals conduct physical examinations. Based on the results of the diagnosis, patients can get the proper treatment or intervention for their illnesses. Internationally, WHO has developed International Classification of Health Interventions (ICHI) or commonly known as International Classification Diseases (ICD) as a tool to classify diseases. This classification should be translated into all languages in order to get a uniform tool for doing the diagnosis; moreover, it has integrated all public health components and set the international standard for healthcare services (Wübbeler et al., 2021).

4. Treatment

Based on the diagnosis results, healthcare professionals can proceed with treatment or therapy which can include various actions such as counseling, drugs, surgery, physical therapy, and others or a combination of these (Cohen & Depetris, 2014).

5. Body System

Last but not least, learning medical terminology also involves the knowledge of human body systems. Body systems can be divided into 12 categories: the cardiovascular system, the respiratory system, the digestive system, the urinary system, the endocrine system, the nervous system, the female and male reproductive systems, blood and immunity, the sensory system, the muscular system, and the skin, all of which has to function well and complement each other in order to reach the homeostasis or the state of internal balance (Cohen & Depetris, 2014).

Translation Procedures

Newmark (1988) offers several procedures (or techniques) that can also be used to translate medical terminologies. In this case, Newmark's procedures refers to particular techniques (or strategies) that translators use to solve problems that they encounter when translating sentences, clauses, phrases, and words of a ST. Newmark (1988) distinguishes translation procedures and translation methods in that the latter refers to the approach which is applied by a translator to translate the entire text. Since this article concerns terminologies which can be in the forms of words and phrases, it would be interesting to discuss the translation procedures used by the translator to cope with the terminologies in the YNSA article. The YNSA article belongs to informative (scientific) text type which usually has a particular technical style, including the use of a lot of terminologies and technical language (medical language).

Newmark (1988) explains several translation procedures, some of which can be summarized as follows.

1. Literal translation

   Literal translation is the basic translation procedure which can be used to translate words, phrases, short clauses, and short sentences with general contexts. The longer the units of translation, the more difficult for the translator to maintain literal translation. This is why literal translation cannot be used when the meaning of a ST is affected heavily by the contexts, including the culture of both ST & TT (Newmark, 1988; Wahyuningsih, 2011).

2. Transference

   This is the act of transferring a SL word/phrase into the TL which results in loan words (borrowing without adjustment) and/or transliteration (conversion to a different alphabet system) because the TL does not have the corresponding words/phrases.

3. Naturalization

   Naturalization is like borrowing with certain phonological and morphological adjustments.

4. Cultural equivalent

   Cultural equivalent (or adaptation) is finding the 'rough' equivalence of SL cultural items in TL cultural items which are less accurate in meaning but is adequate for certain situations where accuracy is not the main issue.

5. Functional equivalence

   Functional equivalence is finding the equivalence of SL cultural items by providing the TL cultural words which have more general meaning (than the SL cultural items) and are more neutral.

6. Descriptive equivalent

   Descriptive equivalent is providing a description of the meaning of the SL word which has no equivalent in the TL, and it does not retain the ST form (Wahyuningsih, 2011).

7. Synonymy

Synonymy is creating the equivalence of SL words by giving a near TL equivalent word in a situation where a precise equivalence may or may not exist and the SL words are not important in the text (adjectives or adverbs).

8. Through-Translation

The through-translation or calque is the literal translation of common collocations, names of organizations, the components of compounds, and popular fixed phrases.

9. Shifts or Transpositions

Newmark uses Catford's 'shift' and Vinay & Darbelnet 'transposition' to refer to translators' acts of changing the grammar from SL to TL which may be inevitable because each language has its own unique system which is not the same with that of another language.

10. Modulation

Modulation refers to the translators' acts of changing perspective or using a different point of view from that of the ST author. This change of viewpoint in TT should preserve the meaning of ST.

11. Recognized translation

Recognized translation refers to the use of the official or generally accepted translation of terminologies for certain fields and organizations.

12. Translation label

Translation label is a temporary translation of an official term in ST which can be discarded after a while (Newmark, 1988).

13. Compensation

    Compensation refers to how losses of meaning, sound-effect, metaphor or pragmatic effect in one part of the sentence are compensated in another part, or in the next sentence.

14. Componential analysis (CA)

    Componential analysis in translation refers to how a lexical unit is translated by splitting it up into its sense components. Thus, one lexical unit in SL can be split into two parts or more in TL.

15. Reduction and expansion

    Reduction and expansion are rather inaccurate translation procedures which can be tolerated only in certain cases. In reduction, translators only translate the most important part of a translation unit, whereas in expansion they use more TL words in order to re-express a SL idea or to reinforce the meaning of ST words because there is not a one-to-one correspondence with any TL words.

16. Paraphrase

    Paraphrase refers to how the translators amplify or explain the meaning of ST words or phrases when they are poorly written or lack clarity. This involves insertion of important information which is not written in ST which makes the TT have a more detailed explanation than that of the ST.

17. Couplets

    Couplets (or triplets or quadruplets) are combinations of procedures used by translators to translate certain parts of ST. They are mostly used for cultural words.

18. Notes, additions, and glosses

    This refers to how the translators provide extra information in the form of footnotes, endnotes, glossaries, and extra information given between brackets within the text.

In addition to the translation procedures explained by Newmark (1988), Hoed added one procedure of not translating the ST and use the SL (foreign) words or phrases in TT by writing them in italics (2006, pp. 77-78). On some occasions, the translator can give some notes to accompany the SL words or phrases in a footnote to clarify some matters. In this article, this procedure is renamed as 'using the foreign words and phrases in italics.'

METHOD

The study is a descriptive qualitative study which investigates the translation procedures of medical acupuncture terms from an English ST and its Indonesian TT with the topic of medical acupuncture. The data were taken from an article entitled *Safety of Yamamoto New Scalp Acupuncture in Healthy Subjects and the Relationship Between Shoulder Stiffness, Diagnosis Points, and Stimulation Points* which was published in 2021. The data were analyzed based on the concepts of medical terminologies by Cohen & Depetris (2014) and the translation procedures by Newmark (1988). After that, the conclusion is drawn from the analysis.