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MEDICAL TRANSLATORS AND MEDICAL DICTIONARIES

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Abstract: Medical translators should be aware of ambiguities and inconsistencies found in standard medical reference works. I will point these out through a comparative analysis of *Dorland's* and *Stedman's* medical dictionaries, with appropriate examples.

1. INTRODUCTION

Only a handful of the 500 or so members of the Medical Division of ATA are physician translators. The rest of us, mainly freelancers, work in several subject areas, some of which are not even related. There are very few in this group who work exclusively in the field of medicine. Add to this the fact that most of us have no formal training in this particular discipline, and it becomes very obvious that we as medical translators need help, not only in how to, but also in what.

There are several single-volume general medical dictionaries in print: *Dorland's*, *Gould*, *Mosby's*, *Stedman's*, *Taber's*, *Churchill's*, and a few others. Some of these English-language dictionaries are also available online, but not all of them offer free access. We should make use of the freely available *Merck Manual of Diagnosis and Therapy*. This volume is a *sine qua non*. Fortunate are those who have this invaluable tool at their disposal in both their source and target languages. However, we should not rely exclusively on any one resource; we must make use of a variety of medical dictionaries, bilingual and monolingual – paper, online, or CD.

My goal here is to show translators aspects of medical terminology that they must be aware of, namely, the ambiguities and inconsistencies found in these standard reference works. I will accomplish this through a comparative analysis of *Dorland's* [D] and *Stedman's* [S] medical dictionaries; these are, in my opinion, the most popular medical dictionaries available. I will also refer to *Gould* [G], *Mosby's* [M], and *Taber's* [T] throughout the text. (Please see **References** for publication details of all sources mentioned in this article.)

2. COMPARATIVE ANALYSIS OF DORLAND'S AND STEDMAN'S MEDICAL DICTIONARIES

2.1 Common Features

Before discussing various terminology differences between *Dorland's* and *Stedman's*, I will mention just a couple of the features they have in common:

- (a) They cover basically the same areas of medicine, with *Dorland's* having approximately 115,000 entries against *Stedman's* 102,000.
- (b) Both of them have the seemingly inevitable curse of all types of written material, namely typographical errors. These span a whole range of mistakes, from simple misspellings (**pulmon[a]ry** – S 237; **rule[r]** – D 1873), to misplaced entries (**syphilitic meningoencephalitis** – D 1126), inconsistent use of apostrophe (**Kirschner's apparatus** – D 118, **Kirschner wire** – D 2065), redundancy (**fibular, fibular** – S 672), incorrect syntax (**whose walls of which** – D 1725), and so on. Although these two dictionaries have gone through numerous editions over the past 100 years, errors of this type persist. (The above citations are from the most recently published volumes.)

2.2 Differences

Scope and format

The fact that these two dictionaries cover basically the same subject area and provide similar information means that there are enough differences to warrant profitable publication as separate volumes. Differences include the following:

- (a) *Dorland's* has a larger number of entries and includes proprietary drugs.
- (b) *Stedman's* has more synonyms and more psychiatric terms, and a section called WordFinder, which is a master cross-referencing system.

Obsolete/archaic terms, Yes or No?

This is the real beginning of my thesis. I am starting with this particular category of differences in terminology between *Dorland's* and *Stedman's* because I find it to be the least problematic and the least consequential of the issues raised in this article.

What is obsolete, old, archaic? Let's take an example: *Stedman's* defines **neurasthenia** as "an ill-defined condition, commonly accompanying or following depression, characterized by vague fatigue believed to be brought on by psychological factors" (p. 1206). *Stedman's* does not consider this an obsolete term. *Dorland's* agrees with the definition, but it considers the term obsolete (and *Taber's* agrees). Here are a few more examples of the dilemma we face in this particular category (with agreement of other dictionaries indicated in brackets):

Term	<i>Dorland's</i>	<i>Stedman's</i>
apoplexy	Obsolete	Not obsolete [T]
Chicago disease	Not obsolete	Obsolete
nanism	Not obsolete [M, T]	Obsolete
pathema	Not obsolete	Obsolete
roentgenography	Obsolete	Not obsolete [T]

When we as translators find a term that is considered obsolete by both sources, as is, for example, the case with **gleet**, it is not difficult to avoid using the term. Unfortunately, this rarely happens. For all practical purposes, *Dorland's* and *Stedman's* usually disagree on this issue. It is quite telling that *Dorland's* has "eliminated hundreds of obsolete terms," while *Stedman's* has deleted "7904 obsolete terms." The other standard reference works, namely, *Taber's*, *Gould*, *Mosby's*, and *Churchill's*, side with one or the other, leaving the translator confused. Unfortunately, the Internet does not offer much help in this regard. Personally, I have no preference one way or another; I let the customer decide.

Synonyms, Yes or No?

There are very few medical terms, either in *Dorland's* or *Stedman's*, and especially in *Stedman's*, that are without synonyms (terms that have the same or nearly the same meaning as other terms). Some of these are easily identified as such, e.g.: *disease – sickness – illness* and *skin – cutis*; and some are not, e.g.: *Brown-Séquard paralysis – Brown-Séquard sign – Brown-Séquard syndrome* and *salt-losing crisis – salt-losing defect – salt-losing syndrome*.

On the other hand, there are hundreds of terms that are synonymous according to *Dorland's*, and not according to *Stedman's*, and vice versa. Here is an example:

Note: In all tables that follow, definitions are quoted from the source indicated at the top of the column; punctuation may be changed and abbreviations expanded for clarity. Agreement by other resources is indicated in brackets; clarifications by the author also appear in brackets.

<i>Dorland's</i>	<i>Stedman's</i>
<p>ping-pong fracture: A type of oppressed skull fracture usually seen in young children, resembling the indentation that can be produced with a finger in a ping-pong ball; when elevated it resumes and retains its normal position [T]; <i>called also pond fracture</i></p>	<p>ping-pong fracture: <i>See derby hat fracture</i></p> <p>derby hat fracture: Regular cranial concavity in infants; may or may not be associated with fracture; <i>syn. dishpan fracture</i></p>

According to *Stedman's*, **pond fracture** ("a circular depressed skull fracture") is not a synonym of **ping-pong fracture**, while *Dorland's* contains neither **derby hat fracture** nor **dishpan fracture**.

Here are a few more examples of disagreements regarding synonymous terms:

Terms	<i>Dorland's</i>	<i>Stedman's</i>
circular amputation linear amputation guillotine amputation	Not synonyms	Synonyms
antrostomy antrotomy	Synonyms [G]	Not synonyms [T]
cingulectomy cingulotomy	Not synonyms [G, T]	Synonyms
hypodontia oligodontia	Not synonyms	Synonyms
air sickness aerial sickness	Synonyms	Not synonyms [T]

What is a translator to do? Be careful. Stay within the context at all times, making sure you understand the meaning of the term in both languages.

One term, different wording

Even a casual look at different terms will quickly show how a single medical concept is expressed differently by these two major reference works. Here are a few examples (emphasis added):

<i>Dorland's</i>	<i>Stedman's</i>
Kühne's <u>muscular</u> phenomenon	Kühne phenomenon
Essig- <u>type</u> splint	Essig splint
subcutaneous fat necrosis	subcutaneous fat necrosis <u>of newborn</u>
Bell's <u>nerve</u>	Bell <u>respiratory</u> nerve
Begg technique	Begg <u>light wire differential force</u> technique
Angle's <u>classification</u>	Angle classification <u>of malocclusion</u>
Holmgren's <u>test</u>	Holmgren <u>wool</u> test
Schauta's <u>operation</u>	Schauta <u>vaginal</u> operation
Bunsen coefficient solubility coefficient	Bunsen solubility coefficient
Broca's plane orbital plane visual plane	Broca visual plane

The translator needs to be aware of this particular feature of medical terminology in English. Does a similar situation exist in the other half of your language pair?

One term, one or more meanings

This category of terms is very extensive and extremely important for the translator. A term in *Dorland's* may have only one meaning, while the very same term may have as many as four different meanings in *Stedman's*, and vice versa. It is therefore important for the translator to know exactly which meaning is implied in a particular context going into English – and from it.

<i>Dorland's</i>	<i>Stedman's</i>
Trendelenburg('s) operation	
1. Transthoracic pulmonary embolectomy 2. An early method for treating varicose veins 3. Synchondroseotomy [bladder]	1. Pulmonary embolectomy
diacrisis	
1. Diagnosis 2. A disease marked by a morbid state of the secretions 3. A critical discharge or secretion	1. Diagnosis [G]

<i>Dorland's</i>	<i>Stedman's</i>
extorsion	
1. Outward rotation of the upper pole of the vertical meridian of each eye; <i>called also obtorsion and disinclination</i>	1. Outward rotation of a limb or of an organ [T, G] Conjugate rotation of the upper poles of each cornea outward; <i>syn. excyclotorsion</i> [G]
symphysis	
1. Fibrocartilaginous joint	1. Form of cartilaginous joint in which union between two bones is effected by means of fibrocartilage; <i>syn. amphiarthrosis</i> [T] 2. A union, meeting point, or commissure of any two structures [T] 3. A pathologic adhesion or growing together; <i>syn. secondary cartilaginous joint</i>

One term, different meaning

It would be difficult, if not impossible, to find a more serious problem confronting the medical translator than the one illustrated by the examples in this category. My professional life as a medical lexicographer started 25 years ago when I was startled by the discovery of two Lane's diseases. Take a look at the following examples.

<i>Dorland's</i>	<i>Stedman's</i>
Lane('s) disease	
Chronic intestinal stasis; small bowel obstruction in chronic constipation [G, T]	A condition characterized by asymptomatic symmetrical palmar erythema; <i>syn. erythema palmare hereditarium</i>
Budge('s) center	
A reflex center in the sacral spinal cord that regulates erection of the penis or clitoris; <i>called also erection center; genital center; genitospinal center</i>	Preganglionic motor neurons in the first thoracic segment of the spinal cord which gives rise to the sympathetic innervation of the dilator muscle of the eye's pupil; <i>syn. ciliospinal center</i>
Barré('s) sign	
Contraction of the iris is retarded in mental deterioration	If the hemiplegic is placed in the prone position with the limbs flexed at the knees, he's unable to maintain the flexed position on the side of the lesion but extends the leg [<i>Dorland's</i> calls this <u>Barré's pyramidal sign</u>]
Madelung('s) disease	
Radial deviation of the hand <i>called also Madelung's deformity; carpus curvus</i>	Accommodation and progressive enlargement of collections of adipose tissue in the subcutaneous tissue of the head, neck, upper trunk, and upper portions of the upper extremities [T]; <i>syn. multiple symmetric lipomatosis; symmetric adenolipomatosis</i>
hemisection	
Division into two equal parts [G, M, T]	Surgical removal of a root and its related coronal portion of a multirooted tooth [G]
protractor	
An instrument for extracting bits of bone, bullets, or other foreign material from wounds [G, T]	A muscle drawing a part forward, as antagonistic to a retractor; e.g., the serratus anterior muscle is protractor of the scapula [G, T]
pyorrhea	
Periodontitis; marginal periodontitis [G, M]	A purulent discharge [G, M, T]
hyphemia	
Hemorrhage within the anterior chamber of the eye; <i>called also hyphema</i> [G]	A decreased amount of blood in the body [G]; <i>syn. hypovolemia</i>

3. SUMMARY

3.1 The Problem

Medical terminology is often ambiguous, inconsistent, and inexact, requiring a medical translator to be exceedingly careful in the use of reference works. While a single reference source may be helpful, reliance on any one source to the exclusion of others can be confusing, frustrating, and misleading.

3.2 A Solution

Medical translators must have access to and make consistent use of at least two standard medical dictionaries, paper or electronic, in both the source and target languages. This is recommended for two reasons:

- (a) It helps us find the exact terms, a need demonstrated in this article.
- (b) It provides us with a greater pool of medical words, the need for which is shown in the following list of terms found in neither of the two major dictionaries we just compared.

activity therapy; alcoholic paralysis; cardiac neuralgia; degenerative neuritis; dexterity; disease burden; finger sweep; full/normal/regular diet; hypobulia; hysterolithiasis; reflex excitability; retrovaccination; sick certificate; snapping knee; solar radiation; tick-borne rickettsiosis; triradiate pelvis

3.3 Conclusion

It is essential that the translator use all available and necessary resources in order to understand the given subject matter. The translator must stay within the context in both the source and target languages so as not to go astray.

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