

Beyond Philology No. 17/4, 2020  
ISSN 1732-1220, eISSN 2451-1498

<https://doi.org/10.26881/bp.2020.4.03>

## **A quantitative analysis of translation strategies used in the translation of the International Classification for Nursing Practice into Polish**

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*Received 27.11.2020,  
received in revised form 28.12.2020,  
accepted 29.12.2020.*

### **Abstract**

This article discusses the standardisation and translation of the International Classification for Nursing Practice (ICNP). The material used in the analysis is the ICNP in translation into Polish. The terms are grouped into the following categories: cross-cultural equivalent, terminological equivalent, descriptive equivalent, calques and borrowings, neologism. The results indicate which is the most frequent strategy involved using cross-cultural equivalents (1987 terms, 49.96 %). Calques and borrowings are present in 1025 terms (25.77 %), 904 (22.73 %) terms are terminological equivalents. There were only 61 (1.53 %) descriptive equivalents. No neologisms were found in the Classification.

### **Keywords**

medical terminology, nursing terminology, ICNP, translation strategies, medical translation

## **Analiza ilościowa strategii przekładowych zastosowanych w tłumaczeniu Międzynarodowej Klasyfikacji Praktyki Pielęgniarskiej ICNP na polski**

### **Abstrakt**

W artykule omówiono zagadnienie standaryzacji terminologii oraz analizę tłumaczenia Międzynarodowej Klasyfikacji Praktyki Pielęgniarskiej (ICNP) na język polski pod kątem zastosowanych strategii. Przetłumaczone terminy zostały podzielone na następujące kategorie: ekwiwalent międzykulturowy, ekwiwalent terminologiczny, ekwiwalent opisowy, kalki i zapożyczenia oraz neologizm. Wyniki opisanego badania wskazują, że najczęściej w tłumaczeniu ICNP na polski stosowane są ekwiwalenty międzykulturowe (1987 terminów, 49,96 %). Kalki i zapożyczenia występują w 1025 terminach (25,77 %), 904 (22,73 %) terminy to ekwiwalenty terminologiczne. Ekwiwalentów opisowych znaleziono tylko 61 (1,53 %). W Klasyfikacji nie stwierdzono neologizmów.

### **Słowa kluczowe**

terminologia medyczna, terminologia pielęgniarska, ICNP, strategia przekładowa, tłumaczenie medyczne

### **1. Introduction**

Terminology is one of the most prominent features of LSP (*Language for Special Purposes*), special or specialised language. Modern terminology, understood both as a discipline and system of terms, is to an extent influenced by the work of Wüster and the principles of the Vienna School for Terminology, which involve the onomasiological perspective, the postulate for concepts to be clear-cut, the relationship between concepts and terminological definitions, the univocity principle and the synchrony principle (Temmerman 2000: 4–14, see Wüster 1979). Newly-formed terms are expected to be precise and unambiguous, mainly resulting from the principle of univocity, which involves a combination of monosemy and mononymy

(Temmerman 2000: 10, Felber 1984, see Wüster 1979). The issues discussed in this paper concern terminology as a set of terms with a particular interest in secondary term formation (Sager 1997: 27–39), which may either involve a monolingual revision of terminology or transfer of scientific and technological knowledge from one linguistic community to another, very often through translation, including borrowing or calque, which is very common in massive terminology transfer. The latter kind of secondary formation can also be called secondary neology or translation neology (Sager 1990, 1993; Cabré Castellví et al. 2012). Quite understandably, the attitudes in designing language policies in secondary term formation or translation neology will vary from purist to permissive (Sager 1997: 41) in terms of accepting foreign elements in terminology transfer. The aim of this study is to determine strategies used in the translation of ICNP (International Classification for Nursing Practice) terminology into Polish, trace trends present within this particular terminology transfer case and comment on translation-related terminology problems.

## **2. Background**

There seems to be a consensus that the principles of the Vienna school, i.e. the postulates for clear-cut concepts, the univocity principle and the synchrony principle are, in fact, desirable features rather than actual characteristics of the controlled terminology which is and has been developing exponentially as a result of social, technological and institutional processes and their specific needs (Temmerman 2000: 16). Systems of terms, terminologies are controlled and standardised because “traditional schools believed in the need for standardisation in order to improve special language communication” (Temmerman 2000: 11) but also because standard becomes all-important (Temmerman 2000: 11) in large institutions or in communities where, as in healthcare and flight control, accurate communication is crucial and where there is no room for ambiguity, and misunderstandings may have critical consequences. On the

other hand, socio-cognitive approaches to terminology involve combining the semasiological and onomasiological perspective, recognising the fact that categories cannot always be distinctly delineated, definitions may vary, and synonymy and polysemy are present in specialised terminologies (Temmerman 2000).

English medical terms can be divided into three groups: basic English (BE), fundamental medical English (FME) and specialised medical English (SME) (Salager 1983). Fage-Butler and Nisbeth Jensen (2016) developed a five-category division: dictionary-defined medical terms, co-text-defined medical terms, medical initialisms, medication brand names and colloquial technical terms. Those divisions are structured around the lay/expert axis and accommodate specialised terms as well as units from the general register used in medical communication (see Montalt, Zethsen and Karwacka 2018).

In the case of medical terminology, monoreferentiality (Gotti 2011) or univocity (Felber 1984) principles are not always satisfied as medical terms include lexical units associated with general register, doublets, synonyms, and polysemous terms despite the need for clarity and precision in interprofessional communication (Mitzkat et al. 2016), which is seen in projects aimed at controlling and standardising medical terminology especially in regulatory registration and reporting (see Montalt, Zethsen and Karwacka 2018).

Increasing standardisation and control over medical terminology to an extent result from the need for integrating terminologies and classifications with healthcare information systems to enable the electronic exchange of clinical data (Cimino 1998; Awaysheh et al. 2017). One of the most widely used classifications is the International Statistical Classification of Diseases and Related Health Problems. SNOMED CT, maintained by the International Health Terminology Standards Development Organisation (IHTSDO), which is, in fact, a consolidation of two controlled terminologies: SNOMED RT and Clinical Terms Version 3, is also among the leading healthcare terminology systems (Wang et al. 2001). In fact, there are numerous clinical classifications (e.g. ICD, ICF, ICPC, MedDRA, DSM, MEDCIN for

diagnosis, CPT, CDT, HCPCS for procedures, at least several classifications for nursing, diagnostic tests, medical devices etc.). One of the reasons for such an abundance of classifications is that none of them is a universal one as they serve different purposes and are used in different healthcare sectors. They still need to be compatible since data are transferred between different systems, which is the why terminology systems are mapped, i.e. aligned to ensure adequate information exchange (Fung 2007, Cardillo 2015, see also Montalt, Zethsen and Karwacka 2018).

This article discusses standardisation and translation of the International Classification for Nursing Practice (ICNP), a formal terminology first developed in 1995 by the International Council of Nurses (ICN 2020). It is a glossary of terms for nursing activities and the rationale behind its development was to facilitate communication in the nursing community through the consistent and systematic use of specific language in reporting. Consequently, it is meant to support decision-making, nursing education, health policy development and managing data sets for research. It is a unifying nursing language system whose aim includes “harmonisation with other widely used classifications and the work of standardisation groups in health and nursing” (ICN 2020). ICNP is consistent with ISO 1087-1:2000 vocabulary, and it is mapped onto the anatomical terminology system SNOMED CT.

ICNP has so far been translated into 19 languages, including Polish (ICN 2020). As the original Classification is subject to updates, new translations are required to reflect changes in the original. The Guidelines for the translation of ICNP suggest striving for “cross-cultural equivalence” of concepts rather than word-for-word translation or “etymological equivalence” (ICN 2018). Translators are advised to “avoid ambiguous terms that have more than one meaning” (ICN 2018), which means that polysemous and synonymous terms are to be avoided. It is consistent with other terminology development guidelines or standardisation, such as striving for univocity, monoreferentiality, and avoiding polysemy and synonymy. ICN guidelines for

translation also include recommendations to avoid colloquial phrases and jargon, and guidance on tackling terminological gaps: “if there is no appropriate term in the target language, translate the source term into a set of words using the definition” (ICN 2018).

ICNP is a formal terminology where secondary term formation is present, but the formation process is dissimilar in the English and the Polish version and, in fact, any other non-English version. The terms are arranged in 7 axes: focus, judgement, client, action, means, location. The original terminology is based on the Web Ontology Language (OWL) (Hong et al. 2006). Moreover, the system is consistent with ISO 1087-1:2000. The formation process of the Polish version involves translation, or — to be more specific — a number of translation strategies. It is vital to note that the classification concerns concepts which are generally recognised in the nursing community rather than discoveries or inventions, which is why translation often involves using an existing terminological equivalent, while on other occasions, a cross-cultural equivalent which may be a multi-word unit which had not been previously terminologised and is now used consistently throughout the Classification, for instance, EN: ‘Medication Reconciliation’ – PL: ‘rozliczenie leków’.

Since the ICNP translation guidelines and in fact, other guidelines and expectations discussed above include what seem to be conflicting recommendations: univocity vs avoiding jargon vs cross-cultural equivalence vs standardisation etc., at least some terms are not likely to satisfy those postulates completely. So far, there have been no available translation studies on nursing terminology or translation-driven nursing term formation and use. Although there are studies available on specialised discourse and how it is affected by multilingualism or institutional harmonisation (e.g. Biel 2014), there are no available translation analyses of interlingual transfer of nursing terminology or corpus analyses of nursing texts to trace standardisation, or studies into translation as secondary term formation in massive terminology transfer.

The available studies of a slightly similar scope of interest

show quantitative term formation in Japanese (Kaguera 2002) and medical term formation (Džuganova 2006, 2013) with a particular interest in affixation. Górnicz (2009) is interested in specialised terminology in specialised texts – he studies English, Polish and Russian medical terms (immunology) for term naturalness, term formation, borrowings etc. and notices similar growing homogenisation of specialised languages. Fernández-Domínguez (2016) conducted a corpus-based study into the morphosemantics of word-formation from a contrastive perspective which showed that explicitness of expression is favoured over equivocality in term formation. The study, however, did not focus on translation.

Several studies assess the use of controlled terminologies in data processing in healthcare, e.g. Humphreys et al. (1997), Goossen (2006), Elfrink (2001). Strudwick and Hardiker (2016) present a review of ICNP-related studies terminology — most research is into the classification system itself, and fewer studies focus on the outcomes of nursing practice processed by the system: Cho and Park (2006), Cardoso and Paiva e Silva (2010), Dykes et al. (2009). Several other articles discuss mapping country-specific nursing terminology systems onto ICNP, e.g. Hong and Ruknuddin (2012), Matney et al. (2008); Kuo and Yen (2006), Laukvik et al. (2015) but they usually concern a subset of the Classification, and the analyses are conducted from the perspective of healthcare disciplines and healthcare needs rather than that of translation studies or linguistics; in short, they explore the healthcare dimension of the Classification, not its linguistic one.

### **3. Material and method**

The material used in the analysis is the International Classification for Nursing Practice in translation into Polish (the 2017 release). The ICN-Accredited Centre provides access for ICNP Research and Development for research purposes free of charge. Term pairs were analysed for translation strategies and marked manually in an MS Excel file. The concept of translation strategy

can be problematic as the term 'strategy' is not consistently used by translation researchers (see Kearns 1998/2011: 282). In this article it is understood as ways of handling lexical (terminological) items and language structures. The premise of this analysis is that in the case of ICNP, secondary term formation is conducted in a controlled way by means of translation. The results will indicate the prevalence of particular translation strategies in the Classification and, possibly, those strategies which are not used at all. The terms are grouped into the categories of the following translation strategies:

- *cross-cultural equivalent* — an accurate and functional translation which does not involve using previously terminologised units;
- *terminological equivalent* — an accurate and functional translation which involves using previously terminologised units;
- *descriptive equivalent* — using a definition or an explanation to fill a terminological gap;
- *calques and borrowings* — an umbrella category for *borrowing*, i.e. transferring the original term with only minor adjustment to the target language diacritic system (Waliński 2015: 59), *lexical calque*, i.e. preserving the syntactic structure of the target language while introducing a new mode of expression (Waliński 2015: 59) and *structural calque*, i.e. literal translation which introduces a new construction into the target language (Waliński 2015: 59);
- *neologism* — forming a new word to fill a terminological gap.

The categories of strategies are based on secondary term formation processes described by Sager (1997) and guidelines for ICNP translation issued by the International Council of Nurses (2008), as discussed above, to serve the purpose of analysing terms in translation.

The categories of borrowings and calques are combined as they all involve transferring patterns from the source language and can co-exist in multi-word units in various combinations, such as structural calque + lexical calque or borrowing + structural calque or on their own. The remaining categories are



exclusive, i.e. if a unit is a terminological equivalent, it cannot be a descriptive one etc.

This study is in line with the assumptions of Descriptive Translation Studies (DTS) (see Toury 1995, Hermans 1998, Chesterman 1998, 2006, 2008) since term translation strategies have been observed to determine regularities in translation, find prevalent strategies and features of this secondary term formation process in massive terminology transfer. The study does not involve quality assessment evaluating the adequacy of translation solutions or formulating prescriptive conclusions as that would undermine its descriptive character.

#### **4. Results and discussion**

The total number of terms in the Classification was 4325, and it included pre-existing terms widely used in medical contexts, such as *paresis* or *pleura* and newly formed multi-word terms, such as *presence of implantable cardiac device* or *collaborating with social worker*. After eliminating duplicates (i.e. terms occurring in one axis and repeated in another axis) – 3977 unique terms were marked as terminological equivalents, cross-cultural equivalents, descriptive equivalents, calques and borrowings, and neologisms.

The most frequent translation strategy involved using cross-cultural equivalents (1987 terms, 49.96 %). Calques and borrowings are present in 1025 terms (25.77 %); 904 (22.73 %) terms are terminological equivalents. There were only 61 (1.53 %) descriptive equivalents. No neologisms were found in the Classification (see Table 1).

**Table 1**  
Strategies used in the translation of ICNP into Polish

Term translation strategy	Number of terms translated with each strategy	%
Cross-cultural equivalent	1987	49.96
Calque or borrowing	1025	25.77
Terminological equivalent	904	22.73
Descriptive equivalent	61	1.55

Tables 2–6 include examples of strategies used in the translation of ICNP. Table 1 below can serve as an example of both consistency and cross-cultural equivalence of terminologised units, although it should be noted that, for instance, *umiejętność komunikowania* is a more usual collocation than *zdolność komunikowania* and appears more frequently in the National Corpus of Polish (Pęzik 2012). Although the examples in Table 2 are literal translations of the source terms, they are acceptable in Polish and are therefore categorized as cross-cultural equivalents.

**Table 2**  
Examples of cross-cultural equivalents

Term in English	Term translated (into Polish)
Ability to Communicate	zdolność komunikowania
Ability to Communicate Feelings	zdolność komunikowania uczuć
Ability to Communicate Needs	zdolność komunikowania potrzeb
Ability to Dress	zdolność ubierania
Ability to Feed Oneself	zdolność samodzielnego jedzenia
Ability to Feel	zdolność odczuwania
Ability to Hear	zdolność słyszenia

It is worth noting that the Polish equivalents of terms such as *aphasia* or *amnesia* (*afazja* and *amnezja*, respectively; see Table 3 below) are functional medical terms although they were originally transferred as borrowings into Polish medical terminology. In this study, all such functional terms which come from foreign

languages (quite frequently Greek and Latin via English) and are found in medical or nursing dictionaries, classifications or research papers are categorised as terminological equivalents (not borrowings).

**Table 3**  
Examples of terminological equivalents

Term in English	Term translated (into Polish)
Amnesia	amnezja
Aphasia	afazja
Apnoea	bezdech
Arrhythmia	arytmia

In turn, units which have their equivalents in Polish but are, nevertheless, transcribed and transferred in their (almost) original form are classified as borrowings, for instance – *kontynencja*, *niekontynencja* (*continence* – *trzymanie*, *incontinence* – *nietrzymanie*). Another challenge observed in the calque and borrowing category is related to the *faux amis* phenomenon – *prevention* is translated into *prewencja* (instead of *zapobieganie*), *status* into *status* (instead of *stan*). The calque and borrowing category also includes multi-word terms with the words *regime* (*reżim* in the Polish version, see Table 4 below) and *management* (*zarządzanie* in the Polish version, see Table 4 below). The Polish word *reżim* is more or less equivalent to *dictatorship*, and can sometimes be used in healthcare contexts to denote a pattern or scheme, but collocations such as *reżim bezpieczeństwa dziecka* (*Child Safety Regime*) are unusual. *Management* has a number of equivalents in Polish – *zarządzanie*, *postępowanie*, *prowadzenie*, *posługiwanie (się)*, *leczenie* – used depending on the collocational context. In the Polish version of ICNP, *management* is always translated into *zarządzanie* – probably to ensure consistency throughout the Classification. In fact, it seems that in general, in the translated ICNP version, calques predominate in situations where it is challenging to meet the univocity or monoreferentiality postulates while using

cross-cultural equivalents, which is indicative of the tension between those conflicting expectations. Descriptive terms are usually avoided in this Classification, which is understandable since one of the main aims of ICNP is effective reporting, and, therefore, brevity may be prioritised over linguistic purity.

**Table 4**  
Examples of lexical calques

Term in English	Term translated (into Polish)
Able to manage Medication Regime	zdolny/a do zarządzania reżimem leku
Able to manage Regime	zdolny/a do zarządzania reżimem
Impaired Ability to manage Dietary Regime	zaburzona zdolność zarządzania reżimem diety
Impaired Ability to manage Exercise Regime	zaburzona zdolność zarządzania reżimem ćwiczeń

**Table 5**  
Examples of structural calques

Term in English	Term translated (into Polish)
Altered Perception	zmieniona percepcja
Pain Guideline	wytyczne bólu

Descriptive equivalents are uncommon in the Polish version of ICNP and serve as paraphrases of words which cannot be rendered more concisely, for instance due to cross-linguistic lacunarity, i.e. the absence of a source element in the target language (see Szerszunowicz 2015). In the case of the discussed classification, descriptive equivalents are used particularly in the absence of a word-to-word equivalent, for example the word *groom* is rendered as *zdolność dbania o estetyczny wygląd* (literal back-translation: *the ability to take care of [one's] aesthetic appearance*).

**Table 6**  
Examples of descriptive equivalents

Term in English	Term translated (into Polish)
Ability To Dress And Groom Self	zdolność samodzielnego ubierania i dbania o estetyczny wygląd
Ability To Groom Self	zdolność dbania o estetyczny wygląd

What can also be observed in the Polish translation is consistency – throughout the Classification each word is translated in the same manner even if that involves forming unusual phrases. If two words are close in meaning and can be translated with the same equivalent, they are consistently differentiated throughout the Classification (e.g. *assessing* – *ocenie*, *evaluation* – *ewaluacja*). It seems that consistency is prioritised over linguistic purity, as well. However, despite the complexity of the project and conflicting expectations, cross-cultural translation is the predominant approach (49.96 %) for units which were not previously terminologised. Terminological equivalents account for 22.73 % of all ICNP entries but a vast majority of pre-existing terms included in the Classification. Calques or borrowings seem to be used to achieve monosemy and mononymy, i.e. univocity.

Interlingual massive terminology transfer involves more than translation. For instance, the term that the World Health Organization (WHO 2013) uses to refer to interlingual transfer of its ICD classification is “multilingual representation” (instead of “translation”) to emphasise the desired equivalence of concepts resulting from a semasiological approach rather than word-for-word transfer. The ICNP is going to be managed, produced, released and distributed by SNOMED International (SNOMED International 2020) so quite possibly some changes are to be expected as a result of the mapping processes, which may mean that the approach to secondary term formation will change as well.

## 5. Conclusions

This article presents an analysis of the International Classification for Nursing Practice in translation. The translation of the ICNP involves problems relevant to secondary term formation in various disciplines – conflicting expectations, competitive terms, uncontrolled neology or rather dismissive purist attitudes. The presented study indicates a tendency to avoid neology and descriptive equivalents in the translation of the ICNP. On the other hand, calques and borrowings, which may be controversial from a purist perspective, are used in  $\approx 25\%$  but are outnumbered by cross-cultural equivalents, which are accurate and functional translations. It seems that the distribution of strategies reflects the range of approaches to terminology transfer – from purist to permissive. The next step of research into the ICNP in translation should be verifying if the newly terminologised units are in active use in the nursing community.

## References

- Awaysheh, Abdullah, Jeffrey Wilcke, François Elvinger, Loren Rees, Weiguo Fan, Kurt Zimmerman (2017). “A review of medical terminology standards and structured reporting”. *Journal of Veterinary Diagnostic Investigation – Online First*. Available at <http://journals.sagepub.com/doi/pdf/10.1177/1040638717738276>. Accessed 27.11.2020.
- Biel, Łucja (2014). *Lost in the Eurofog: The Textual Fit of Translated Law*. Bern: Peter Lang.
- Cabré Castellví, Teresa, Rosa Estopà Bagot, Chelo Vargas-Sierra (eds.) (2012). *Neology in Specialized Communication [Terminology 18:1]*. Amsterdam – Philadelphia: John Benjamins.
- Cardillo, Elena (2015). *Mapping between international medical terminologies. Annex 4 to SHN Work Package 3*. Available at [http://www.semantichealthnet.eu/SemanticHealthNet/assets/File/SHN%20288408%20D3\\_3%20rev2%20Annex%204\\_Cardillo\\_SHN\\_D3\\_3\\_final.pdf](http://www.semantichealthnet.eu/SemanticHealthNet/assets/File/SHN%20288408%20D3_3%20rev2%20Annex%204_Cardillo_SHN_D3_3_final.pdf). Accessed 27.11.2020.

- Cardoso, Alexandrina, Abel Paiva e Silva (2010). "Representing nursing knowledge on maternal and neonatal health: a study on cultural suitability of ICNP®". *International Nursing Review* 57: 426–434.
- Chesterman, Andrew (1998). "Description, explanation, prediction: A response to Gideon Toury and Theo Hermans". In: C. Schäffner (ed.) *Translation and Norms*. Clevedon: Multilingual Matters, 91–98.
- Chesterman, Andrew (2006). "A note on norms and evidence". In: Jorma Tommola, Yves Gambier (eds.) *Translation and Interpreting – Training and Research*. Turku: University of Turku, Department of English Translation Studies, 13–19.
- Chesterman, Andrew (2008). "On explanation". In: Anthony Pym, Miriam Shlesinger, Daniel Simeoni (eds.). *Beyond Descriptive Studies. Investigations in homage to Gideon Toury*. Amsterdam – Philadelphia: John Benjamins, 363–379.
- Cho, InSook, Hyeoun-Ae Park (2006). "Evaluation of the expressiveness of an ICNP-based nursing data dictionary in a computerised nursing record system". *International Journal of Nursing Terminologies and Classifications* 13: 456–464.
- Cimino, James J. (1998). "Desiderata for controlled medical vocabularies in the twenty-first century". *Methods of Information in Medicine* 37/4–5: 394–403.
- Dykes, Patricia C., Hyeon-eui Kim, Denise M. Goldsmith, Jeeyae Choi, Kumiko Esumi, Howard S. Goldberg (2009). "The adequacy of ICNP version 1.0 as a representational model for electronic nursing assessment documentation". *International Journal of Nursing Terminologies and Classifications* 16: 238–246.
- Džuganova, Božena (2006). "Negative affixes in medical English". *Bratislavské lekárske listy - Bratislava Medical Journal* 107 (8): 332–335.
- Džuganova, Božena (2013). "English medical terminology – different ways of forming medical terms". *JAHK – Annual of the Department of Social Sciences and Medical Humanities* 7/4: 55–69.
- Elfrink, Victoria, Suzanne Bakken, Amy Coenen, Barbara McNeil, Carol Bickford (2001). "Standardised nursing vocabularies: a foundation for quality care". *Seminars in Oncology Nursing* 17/1: 18–23.
- Fage-Butler, Antoinette M., Matilde Nisbeth Jensen (2016) "Medical terminology in online patient–patient communication: evidence of high health literacy?" *Health Expectations* 19/3: 643–653.
- Felber, Helmut (1984). *Terminology Manual*. Vienna: Infoterm.

- Fernández-Domínguez, Jesús (2016). "A morphosemantic investigation of term formation processes in English and Spanish". *Languages in Contrast* 16/1: 54–83.
- Fung, Kin Wah, Olivier Bodenreider, Alan R. Aronson, William T. Hole, Suresh Srinivasan (2007). "Combining lexical and semantic methods of inter-terminology mapping using the UMLS". *Studies in Health Technology and Informatics* 129. Pt 1: 605–609. Available at <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2430093/>>. Accessed 27.11.2020.
- Gotti, Maurizio (2011). *Investigating Specialized Discourse*. Bern: Peter Lang.
- Goossen, William (2006). "Cross-mapping between three terminologies with the international standard nursing reference terminology model". *International Journal of Nursing Terminologies and Classifications* 17/4: 153–164.
- Górnicz, Mariusz (2009). "Transfer międzyjęzykowy w terminologii i tekstach specjalistycznych". In: Jerzy Lukszyn, Aleksandra Waszczuk-Zin (eds.) *W kręgu problematyki technolektalnej*. Warszawa: Katedra Języków Specjalistycznych UW, 72–95.
- Hermans, Theo (1998). "Translation and normativity". In: Christina Schäffner (ed.) *Translation and Norms*. Clevedon: Multilingual Matters, 50–71.
- Hong, Woi-Hyun, Amy Coenen, Nick Hardiker, Claudia Bartz (2006). "Changes in the ICNP Version 1.0 from Beta 2". *Studies in Health Technology and Informatics* 122: 503–504.
- Hong, Jungyun, Rafat J. Ruknuddin (2012). "Analysing nursing notes by cross-mapping to ICNP (International Classification for Nursing Practice) in maternity unit in one of the tertiary hospitals in Pakistan". *Nursing Informatics*. Available at <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3799119/>>. Accessed 27.11.2020.
- Humphreys, Betsy L., Alexa T. McCray, May L. Cheh (1997). "Results of NLM/AHCPR large scale vocabulary test, original investigations". *Journal of the American Medical Informatics Association* 4: 484–500.
- ICN (2018) *Translation Guidelines for International Classification of Nursing Practice (ICNP®)*. Geneva. Available at <<https://www.icn.ch/sites/default/files/inline-files/ICNP%20Translation%20Guidelines%202018.pdf>>. Accessed 27.11.2020.
- ICN (2020) *About ICNP®*. Available at <<https://www.icn.ch/what-we-do/projects/ehealth-icnptm/about-icnp>>. Accessed 27.11.2020.



- Kaguera, Kyo (2002). *The Dynamics of Terminology: A Descriptive Theory of Term Formation and Terminological Growth*. Amsterdam – Philadelphia: John Benjamins.
- Kearns, John (1998/2011). “Strategies”. In: Mona Baker (ed.). *Routledge Encyclopedia of Translation Studies*. London: Routledge, 282–285.
- Kuo, Chun-Hua, Yen Miaofen (2006). “Cross-mapping ICNP terms with Taiwanese gynecological nursing records”. *Journal of Nursing Research* 14: 271–278.
- Laukvik, Lene Baagøe, Kathy Mølsted, Mariann Fossum (2015). “The construction of a subset of ICNP® for patients with dementia: a Delphi consensus and a group interview study”. *BMC Nursing* 14: 1–9.
- Matney, Susan A., Rebecca DaDamio, Carmela Couderc, Mary Dlugos, Jonathan Evans, Gay Gianonne, Robert Haskell, Nicholas Hardiker, Amy Coenen, Virginia K. Saba (2008). “Translation and integration of CCC nursing diagnoses into ICNP”. *International Journal of Medical Informatics* 15: 791–793.
- Mitzkat, Anika, Sarah Berger, Scott Reeves, Cornelia Mahler (2016). “More terminological clarity in the interprofessional field – a call for reflection on the use of terminologies, in both practice and research, on a national and international level”. *GMS Journal for Medical Education* 33:2. Available at <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4895843/>>. Accessed 05.11.2020.
- Montalt, Vicent, Karen Zethsen, Wioleta Karwacka (2018). “Medical translation in the 21st century – challenges and trends”. *MonTI* 10: 27–42.
- Peżik, Piotr (2012). “Wyszukiwarka PELCRA dla danych NKJP”. In: Adam Przepiórkowski, Mirosław Bańko, Rafał L. Górski, Barbara Lewandowska-Tomaszczyk (eds.). *Narodowy Korpus Języka Polskiego*. Warszawa: Wydawnictwo PWN, 253–273.
- Sager, Juan C. (1990). *A Practical Course in Terminology Processing*. Amsterdam: John Benjamins.
- Sager, Juan C. (1993). *Curso práctico sobre el procesamiento de la terminología*. Madrid: Fundación Germán Sánchez Ruipérez and Ediciones Pirámide.
- Sager, Juan C. (1997). “Term formation”. In: Sue Ellen Wright, Gerhard Budin (eds.) *Handbook of Terminology Management*. Amsterdam – Philadelphia: John Benjamins, 25–41.
- Salager, Francoise (1983) “The lexis of fundamental medical English: Classificatory framework and rhetorical function (a statistical approach)”. *Reading in a Foreign Language* 1/1: 54–64.

- SNOMED International (2020). Available at <<https://www.snomed.org/news-and-events/articles/ICN-SNOMED-sign-groundbreaking-agreement-2020>>. Accessed 27.11.2020.
- Strudwick, Gillian, Nicholas R. Hardiker (2016). "Understanding the use of standardised nursing terminology and classification systems in published research: A case study using the International Classification for Nursing Practice®". *International Journal of Medical Informatics* 94: 215–221.
- Szerszunowicz, Joanna (2015). "Lacunarity, lexicography and beyond: integration of the introduction of a linguo-cultural concept and the development of L2 learners' dictionary skills". *Lexicography ASI-ALEX* 2: 101–118. Available at <<https://doi.org/10.1007/s40607-015-0015-6>>. Accessed 27.11.2020.
- Temmerman, Rita (2000). *Towards New Ways of Terminology Description. The Sociocognitive Approach*. Amsterdam – Philadelphia: John Benjamins.
- Toury, Gideon (1995). *Descriptive Translation Studies and Beyond*. Amsterdam – Philadelphia: John Benjamins.
- Waliński, Jacek T. (2015). "Translation procedures". In: Łukasz Bogucki, Stanisław Goźdź-Roszkowski, Piotr Stalmaszczyk (eds.). *Ways to Translation*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 55–67.
- Wang, Amy Y, James W. Barrett, Tim Bentley, David Markwell, Collin Price, Kent A. Spackman, Miachael Q. Stearns (2001). "Mapping between SNOMED RT and Clinical terms version 3: A key component of the SNOMED CT development process". *AMIA Symposium Proceedings*, 741–745.
- WHO (World Health Organization) (2013). *WHO ICD Revision Information Note*. Available at [https://www.who.int/classifications/icd/revision/17\\_Multilingual\\_Generation.pdf](https://www.who.int/classifications/icd/revision/17_Multilingual_Generation.pdf). Accessed 27.11.2020.
- Wüster, Eugen (1979). *Introduction to the General Theory of Terminology and Terminological Lexicography*. Vienna: Springer.

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