наибольшее распространение эмфатическая местоименная вопросительно-отрицательная конструкция получила в разговорной речи, представленной в разделе TV/Movies, а также в художественной литературе. Являясь средством экспрессивного синтаксиса, данная конструкция функционирует вне диалогических единств в таких письменных жанрах, как газетный, журнальный и жанр интернет-блога.

Литература

1. Буренина Н. В. Эмоциональные конструкции английской диалогической речи (Структурно-семантический и прагматический аспекты): автореф. дис. … канд. филол. наук: 10.02.04. М., 1989. 15 с.

2. Захаров В. П. Корпусная лингвистика: учеб.-метод. пособие. СПб., 2005. 48 с.

3. Кочетова Л. А. Статистические методы в корпусных исследованиях // Теоретические и прикладные аспекты корпусных исследований: сб. науч. тр. Волгоград: Изд-во ВолГУ, 2016. С. 5–14.

4. Лепшокова С. М. Структурные модели местоименных вопросительно-отрицательных местоимений в современном английском языке // Традиции и инновации в системе образования: материалы XVI междунар. науч.-практ. конф. 2019. С. 75–78.

5. Парамонова В. В. Отрицательно-вопросительные конструкции в современном английском языке [Электронный ресурс] // Известия ТулГУ. Гуманитарные науки. 2008. № 1. URL: https://cyberleninka.ru/article/n/otritsatelno-voprositelnye-konstruktsii-v-sovremennom-angliyskom-yazyke (дата обращения: 22.02.2021).

УДК 81

G. F. Gabidinova, Yu. Yu. Lipatova (Kazan, Russia)
Kazan State Medical University

English and Russian abbreviations in medical texts (in case of translating pharmacogenetics texts)

Профессиональный медицинский язык изобилует сложными терминами, для упрощения восприятия которых широко используются аббревиатуры. Однако развитие науки стимулирует возникновение все большего количества сокращений, не являющихся общепринятыми, что может приводить к проблемам в коммуникации специалистов.

Ключевые слова: аббревиатуры, сокращения, медицина, термины

The professional medical language is replete with complex terms, so the abbreviations are widely used to simplify the perception. However, the development of science leads to the emer-

gence of an increasing number of abbreviations that are not generally accepted, which can lead to problems in the specialists' communication.

Keywords: abbreviations, medicine, terms, constituents

The professional medical language is replete with complex terms, the use of which should be convenient and understandable for fast and accurate exchange of information. Abbreviations are widely used for this purpose. However, due to the rapid development of science and the emergence of new, previously non-existent areas, problems arise in the use of abbreviations. They are associated with the lack of generally accepted abbreviations in new fields of science and, since the language of communication of the scientific community is English, with the difficulties of translation from English into others.

The aim of our research is to define main peculiarities and distinctive features of English and Russian abbreviations in the field of pharmacogenetics.

The aim involves the following tasks:

1) to elicit English abbreviations in texts of pharmacogenetics;

2) to research translations and analogues for these abbreviations in Russian;

3) to compare the data obtained;

4) to analyze the use of English abbreviations and their Russian analogues in scientific articles.

In this research we used such methods as: continuous sampling, comparison, lexicographic analysis, discourse analysis, study of dictionary entries' definitions, immediate constituent analysis, element of statistics.

List of English abbreviations with their meanings provided was obtained from research articles: «Pharmacogenetics: Implications for Modern Type 2 Diabetes Therapy», «Pharmacogenetics of type 2 diabetes mellitus, the route toward tailored medicine» [1,2]. These most relevant review articles (2015 and 2019) on the pharmacogenetics of diabetes were selected to analyze abbreviations in this area of science and medicine.

The first article (article 1) contains 23 abbreviations: 87% of them are names of genes or proteins and 13% are other concepts. In the second article (article 2) we found 32 abbreviations: 63% are also the names of genes and proteins, 38% - other concepts. The increased number of abbreviations in article 2 is associated with the growing number of genes and proteins that have emerged in the pharmacogenetics area of interest.

All abbreviations were divided into three groups.

Group (1) English abbreviations that have complete analogues in Russian (abbreviation and its expansion). This group consisted of 7 words (30%) in article 1 and 11 words (34%) in article 2. Russian and English abbreviations' lexical representations mostly coincide: DPP4 (dipeptidyl peptidase 4) – ДПП4 (дипептидилпептида-

за-4), OGTT (oral glucose tolerance test) – ОГТТ (оральный глюкозотолерантный тест). However, some of abbreviations differ: T2DM (type 2 diabetes mellitus) – СД2 (сахарный диабет), BMI (body mass index) – ИМТ (индекс массы тела).

Group (2) English abbreviations that have incomplete analogues in Russian (only expansion). This group consisted of 14 words (61%) in article 1 and 16 words (50%) in article 2: GWAS (genome-wide association study) – «полногеномный поиск ассоциаций», HNF (hepatocyte nuclear factor) – «ядерный фактор гепатоцитов», SLC (solute carrier) – «транспортер растворенных веществ». Almost all the names of genes and proteins were assigned to this group. In these cases, the usage of English abbreviations in scientific articles in Russian was proved. Mostly Russian scientists use such phrases as «ген семейства MATE», «исследования GWAS» instead of giving the full translation of abbreviation expansion and using the Russian analogue.

Group (3) English abbreviations that do not have a generally accepted translation into Russian. This group consisted of two words (9%) in article 1 and four words (13%) in article 2: ENT4 (equilibrative nucleoside transporter 4), Nor1 (neuron-derived orphan receptor 1). We have not found a single translation of these abbreviations in scientific papers. Moreover, the reason for using some of the letter abbreviations in this group remained unclear: KCNQ1 (potassium voltage-gated channel subfamily Q member 1), QPCTL (glutaminyl-peptide cyclotransferase-like).

The next stage involved investigation of English abbreviations' and their expansions' usage frequency in research articles. The analysis was conducted using SpringerLink, the search included only "Biomedicine" discipline and preview content. Five abbreviations (22%) had several definitions. Five abbreviations (22%) in article 1 and 7 abbreviations (22%) in article 2 had several definitions. For example, OCT (organic cation transporter, optical coherence tomography), ABC (ATP-binding cassette, autism behavior checklist, activated B-cell). Some of the abbreviations – 3 words (13%) in article 1 and 5 words (16%) in article 2 – have an established meaning, therefore they are usually used in articles without expansion. The prominent representatives of this group are DNA (deoxyribonucleic acid), BMI (body mass index), HOMA (homeostasis model assessment). Among the abbreviations for genes and proteins, we have identified two possible uses. In the first case, the expansion of the abbreviation reflects the function of a gene or protein; therefore, the authors use the expansion in the articles. For example, function of protein SGLT2 is explained with its' expansion: «sodium/glucose cotransporter 2». In the second case, the expansion does not add relevant information or is outdated. Then the function of a gene or protein is described in a different way, and the expansion is often not used at all. For example, "Dead-Box helicase 10" does not exactly explains the function of the gene DDX10. Anyway, usage of full forms was prevalent. This is explained by the fact

that abbreviations are used to simplify the perception of complex terms, however, the text of the article always contains transcripts that contain the basic meaning.

We also analyzed the English abbreviations and their Russian counterparts in scientific articles in Russian, using the CyberLeninka database. In the case of group (1), mainly Russian well-established analogues of the abbreviations are used in the papers. In group (2) almost complete use of English abbreviations was revealed. Moreover, there often was found Russian translation of the full form (for example, «ген Т-клеточного транскрипционного фактора 7, подобного 2, TCF7L2») and very rarely – the decoding in English. For group (3) no examples of use were found in this database of scientific articles.

Finally, an immediate constituent analysis of English abbreviations was provided using SpringerLink database. The most common constituents in constructs with the names of genes and proteins turned out to be the following: «*X* gene», «*X* protein», «*X* mutation», «*X* allele», «*X* expression», «*X* function», «*X* variants», «*X* activity», «*X* receptor», «*X* deficiency». Among the verb constituents of the names of genes and proteins, the following were usually found: «*X* normalizes», «*X* induces», «*X* prevents», «*X* modulates», «*X* inhibits». While the corresponding patterns of lexical constructions were established in the described group of abbreviations, no patterns were identified for the rest of the words. However, we have established one peculiarity of using some of the studied abbreviations. Such words as SNP (single nucleotide polymorphism), UTR (untranslated region) and OCT (organic cation transporter) were most often found in the constructions "SNP polymorphism", "UTR region", "OCT transporter". Thus, the word contained in the abbreviation itself was used separately. Basically, all discovered constituents performed the functions of clarifying the abbreviations' meanings.

In conclusion, the development of science leads to the emergence of complex terms that are more easily perceived as abbreviations. However, translation of permanently appearing abbreviations from English to Russian arises a number of issues. The lack of connection between the abbreviation and its interpretation in Russian scientific literature makes it difficult to understand and memorize terms. Compilation of a corpus of scientific abbreviations with their generally accepted expansions and translations can solve the problem.

Литература

1. Mannino G. C., Andreozzi F., Sesti G. Pharmacogenetics of type 2 diabetes mellitus, the route toward tailored medicine // Diabetes Metab Res Rev. 2019. V. 35. P. 1–20.

2. Staiger H., Schaeffeler E., Schwab M., Häring H.U. Pharmacogenetics: Implications for Modern Type 2 Diabetes Therapy // The review of diabetic studies. 2015. V. 12, № 3-4. P. 363–376.