English for Medical Purposes: A Review

Shyam Ji Dubey
GLA University, Mathura, India
Email: Shyam.dubey@gla.ac.in
DOI: 10.47750/pnr.2022.13.S0

Abstract
Medical Linguistics is relatively a quite new field to work with. Working on the language of medicine has stimulating challenges to medical practitioners/historians and to linguistics. Though a lot of efforts have been made by classical scholars to do linguistic analysis of the ancient medical literature very minutely, but then from the middle ages until quite recently the field was quite ignored by scholars, consequently a little has been done to identify and work towards English Language Competencies in Pharmaceutical Manufacturing and for medical practitioners. This paper draws a brief review on the history and salient features of the English language used in medical industry, and discusses why English has become lingua franca for global transactions in medicine. It also draws an outline of the issues which generally may arise when medical practitioners differ in terms of language competencies at a workplace. And then the paper suggests some steps that can be followed by the manufacturers and the practitioners to ensure common minimum standards for communication for the staff members.

Keywords: Medical English, English Language Competencies, English for Medical Purposes, Teaching and Learning Medical English.

INTRODUCTION

According to Wulff, 2004, the oldest written sources of western medicine are the Hippocratic writings from the 5th and 4th centuries BC. With this began the Greek era of the language of medicine, and was prevalent even after the Roman conquest. Even today, in day to day conversation by common people we find many Greek originated medical terms: diarrhea, dyspnoea, melancholic, etc. One of the key figures from Roman aristocrats was the writer of De Medicina, Aulus Cornelius Celsus (sometimes called Cicero medicorum. Celsus provided solutions for creating Latin equivalents for Greek medical terms by borrowing, transliterations, and by translating ‘the vivid imagery of the Greek anatomical terminology’ into Latin. Then during the middle ages, with translations from Greek medical texts into Arabic, and with some original contributions to medical literature from Arab world, some Arabic terms found their place in western medicine, though because of less mutual intelligibility, both Greek and Arabic works were translated into Latin; Celsus’ De Medicina, the first medical work in print came in 1478. In the subsequent years, almost all important texts related to medical science were published in Latin. The last work in Latin, William Heberden's Commentarii, appeared in 1802. Then came the time of the national languages; language varieties such as English for medical science, French for medical science, Italian for medical science, German for medical science, and so on… came into existence. Latin was no more a lingua franca for medical practitioners. The national medical languages were common in that most of the technical terms were directly borrowed from Latin.

Gradually, German, English, and French became the prominent languages for the publication of medical literature. It was in the 1950s that English became so powerful that it put an end to linguistic confusion (Baethge, 2008).

English, according to Baethge, 2008, “has assumed a leading role as the international language of medicine”, and is “the unifying language of the healing hearts.” With the advancement of science and technology and with the immense growth and new discoveries in the medical field, new medical terminologies in English language have also come into existence. The reason for English becoming as a lingua franca for medical practitioners is that most of the information, researches and discoveries are published in English language only, and the status of English language in medical field is expected to remain so in the future (Pavel, 2014). A close look on Scopus indexed journals in the field of medicine tells that roughly 90% of these journals are in English. Yet “there is no recognized discipline called medical linguistics” (Wulff, 2004, p. 187). There is no dedicated journal for medical linguistics. Researchers on medical languages publish their papers in linguistic journals, teaching journals multidisciplinary journals, etc. Though all the stakeholders, doctors, students, salesmen, etc are convinced of the importance of
medical English, challenges are many; journals are not available, dedicated linguistic branch is not there, there is a scarcity of translators, medical English is generally not taught to the students and many more. The following sections of this paper will try to show how medical English is different from other registers of English language, and then will have some discussion on teaching and learning process for medical English language competencies.

English for Medical Purposes

Most of the prestigious medical journals are now written in English, which is also the language for international communication and international conferences. Now that medical practitioners have continued to utilise a single language for cross-continenal communication, we have entered the era of medical English, which is comparable to the era of medical Latin. New medical phrases are now frequently, and in some cases wholly, made up of words from daily English as opposed to the past when they were drawn from classical Greek or Latin roots. (e.g. scanning, clearance, base excess, bypass surgery, screening etc.), and physicians from non-English-speaking nations now have the option of either importing these English terms directly or having them translated into their native tongue. For instance, the word "bypass" is used in German, Dutch, Scandinavian, Italian, and Romanian; however, the French, who dislike anglicizations, translated it as "pontage." In several languages, naturalisation of English terms is also fairly prevalent. English acronyms like MR, AIDS, PCR, CT, etc. create a challenge because, typically, the initials do not fit when the English term is translated. However, in most cases, these disparities are just overlooked. For instance, AIDS is generally accepted and has virtually achieved the status of a noun in its own right, despite the fact that it is referred to as SIDA in French, Spanish, and Russian, reflecting the order of the similar words in those languages.

Linguists find the transition of concepts and lexis from one language to another in the medical language to be quite fascinating. Knowing the history and etymology of terms adds a new dimension to a doctor's professional language.

Characteristics of English for Medical Purposes

English for medical science is distinguished by extensive use of specialised lexicon that has several layers, including technical vocabulary, which refers to Latin and English medical terms used in anatomical descriptions and scientific papers (such as tetanus, opisthotonos, acne vulgaris, and diarrhoea); semi-technical vocabulary, which refers to language used in doctor-to-doctor communication (such as acne, eruption, and trismus); and non-technical (col (pimples; rash; red spots ; the runs; lockjaw).

Technical, semi-technical, and common terminology all contribute to the existence of numerous synonyms with varying etymologies. According to Mihaljevi (1998), cited in Gjuraj-Coha & Bosnar-Valkovi (2017, p. 9), "Synonyms in terminology represent words or word combinations which differ orthographically and phonetically yet express equal scientific notions inside a specific microsystem." Many different medical contexts employ synonyms (myopia x short-sightedness; coagulation x blood clotting; initiate x begin; detect x find out). Despite the fact that the former are preferable in scientific writing, the latter are more appropriate when speaking with patients. According to Gjuraj-Coha and Bosnar-Valkovi (2017), "Each functional style of language is marked by a specific use of linguistic means, thereby establishing its own norms which are subservient to the norm-invariant and which do not violate the general norm." Pain is a sudden, unpleasant sensation that typically affects one particular bodily area, such as the back, e.g. the boy was sobbing because of knee pain. An aching in someone's knee can be characterised as a typical dull, persistent pain. One can begin to feel achy when they have aches. The following words are listed as synonyms for the previously described sharp unpleasant sensation known as pain by Merriam Webster Dictionary (2019): ache, pang, prick, shot, smart, sting, stick, throe, tingling, and twinge. Using synonyms incorrectly can frequently result in confusion and incorrect interpretation (Gjuraj-Coha & BosnarValkovi, 2013). One of the difficulties in learning medical terminology is synonyms.

Another aspect of scientific terminology is that syntax and particular syntactic structures are perhaps more important than morphological and lexical semantics. Typically, nominalizations are used in scientific writing, which increases lexical density. According to Rogers (2015), this is a quality of scientific writing that helps knowledge spread more quickly due to the huge number of lexical units that contribute to denser references. This results in a very high level of lexically and syntactically compressed information.

Need of Medical English Teaching and Learning

Medical jargon has evolved over time, just like any other language. But the fundamentals of medical jargon have not changed. The spoken form of the medical language has been around since the beginning of the medical profession itself, even if the
written form of the language may be traced back to the 5th century BC. Though it is still not taught in many medical institutes in India, English for Medical Purposes as a university teaching subject and academic field of inquiry only recently emerged after around 25 centuries. In the global context, English for Specific Purposes started to be consciously explored as a distinct linguistic domain in the 1980s. In medical education, the English language is crucial for presenting research activities on a global scale as well as for learning and knowledge acquisition. The fact that a lot of scientific, technological, and academic material is published or presented internationally in English serves as another evidence of the language's importance in the field of medicine. In the age of modern communication, English is a tool for knowledge exchange. Therefore, encouraging medical students and professionals to learn English is crucial.

Therefore, one of the top concerns in medical education should be learning English for medical purposes. Using English in the workplace is now necessary for healthcare professionals to keep up with medical research and clinical practice. However, there are other aspects that emphasise the importance of the English language in medical education beyond just conducting research and gathering information. The standard of the medical care given may suffer if foreign doctors practicing in some English-speaking nations lack medical language proficiency. Thanks to the abundance of instructional resources, such as medical textbooks customised to students' needs, increased interest in ESP has resulted in an improvement in the level of medical English used in lectures, textbooks, and journal articles.

Teaching/Learning Medical English

Language learning techniques address how to make Medical English, particularly its vocabulary, easier to learn. Many methods for teaching and mastering medical language have been created over the past forty years. A common approach among students towards learning the terminology, according to Brown, 2004, “is via rote memorization, often with little success”. The word analysis technique, which divides words into their morphemes (prefixes, roots, and suffixes), is recommended by studies on language learning because it improves lexical access, knowledge retention, and transfer abilities to other words belonging to the same morpheme families. I.S.P. Nation (2001) asserts that an effective technique should make language acquisition and usage more effective. Rebecca Oxford (1990) believes that strategies are only useful as tools when students are willing to take more ownership of their own learning. The most effective techniques should be picked by the teacher, who should then show the pupils various instances of how they might be used.

In an article published online on Pharma-iq.com, Deshini Chetty, Assistant Director, Business Development from Cambridge English Language Assessment, says that the Common European Framework of Reference for Languages of the Council of Europe can be used to determine the required minimum language proficiency level for job roles (CEFR). The CEFR is the currently accepted international standard used by businesses, educational institutions, and immigration authorities to measure language proficiency. It is used to categorise all prominent language exams. There are three groups that make up this system: A (Basic Speaker), B (Independent Speaker), and C. (Proficient speaker). The scale goes from A1 for complete beginners to C2 for fluent speakers. Chetty says that a person at the C1 level, for instance, can speak English well and be understood by native speakers as well as students from other countries. They have reading comprehension and comprehension of lengthy reports, both of which are essential for senior pharmaceutical specialists. A2 level readers can comprehend uncomplicated information in a familiar domain, such as product information and easy instructions, textbooks, or reports on well-known subjects — appropriate for workers on the factory floor.

Since learning is a personal endeavour, what works for one person may not be suitable for another. Many educators use either an auditory or visual approach. According to studies, learning only stimulates a specific portion of the brain; for example, visual learning uses a distinct portion of the brain than olfactory learning. Students of all learning styles can consequently benefit from combining the senses. Songs, flashcards, and YouTube videos on medical terms or subjects are appropriate supplemental materials for this visual-auditory teaching/learning technique.

Conclusion

In the changing world of medical community, communication in all its forms is becoming increasingly crucial, since miscommunication and mistranslation in the field can have grave repercussions. To guarantee that patients receive the information they need for appropriate treatment and to ensure that research and development is carried out effectively, medical practitioners should constantly improve their communication styles and patterns.
Many well-known companies in the sector are already investing a lot in language enhancement programmes to upskill their employees with the necessary communication skills needed for the workplace. In the same manner many medical colleges offer programmes on language learning, those who are yet not worried about the global demands must do something in this line. Learning a language will prepare a person for global competence as well as promote their continued learning and growth.

REFERENCES