Origin and development of English for Medical Purposes. Part I: Research on written medical discourse

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Abstract

In this two-part review, I present the birth and growth of ‘English for Medical Purposes’, a branch of applied linguistics. This first part summarises the research conducted on English-medium written medical discourse, from early register analysis in the mid-1980s that had a clear pedagogical aim (i.e. teaching reading English-language medical discourse to non-Anglophone medical students and health professionals) to more sophisticated genre and rhetorical studies later on.

Keywords: Medicine, English, Written discourse, Genre

Introduction

The birth and rise of the English for Medical Purposes (EMP) field is related to the mid-twentieth century emergence of English as the lingua franca of scientific communication in general, and of medicine in particular. The evolution is now well documented in a number of publications.1

A few telling figures: by the end of the 1980s, some two million medical papers were published by about 25,000 medical journals, 15,000 of which – all Anglo-American – were considered ‘serious’ journals. By the year 2000, over five million medical papers were published annually.2

If we add to this figure the 500 or so journals in nursing and dentistry, the final figure is 10 million health-related peer-reviewed papers published every year, over 80% of them being written in English. It should be kept in mind that many medical journals that used to be published in national languages have recently switched to English as their language of publication. This is the case of the Croatian Medical Journal, the Mexican Medical Journal, the Saratov Journal of Medical Scientific Research (Russia), and many other medical journals in Latin America, Eastern and Western Europe, Asia, and the Middle East. Incidentally, this linguistic shift is quite frequent also in other disciplines, both the ‘hard’ and ‘soft’ sciences. It should also be stressed that not only English-medium ‘conventional’ medical journals but also journals on alternative and complementary medicine are steadily on the increase.3

This undeniable growth in the volume of English-language medical literature has been accompanied by an important body of linguistic and sociolinguistic research on English written and oral medical discourse, a field that is commonly referred to as ‘English for Medical Purposes’. It is the purpose of this paper to outline briefly its origin and development.

Research on written medical discourse

Early EMP research on written medical discourse: The EMP Newsletter and register analysis

In 1983, a group of English for Specific Purposes practitioners met at a conference for the Arab world. A subgroup discovered by chance a mutual involvement in English for the Health Sciences, and two British linguists, Nigel Bruce and Liz Nakhoul (who then worked at the University of Kuwait) volunteered to initiate an information network. This is how the first EMP journal, the EMP Newsletter, was launched. The Newsletter was welcomed by applied linguists and English language practitioners involved in EMP. The journal was published twice a year and was distributed free of charge across 60 countries to about 450 subscribers. Very sadly, though, Operation Desert Storm in 1990 wiped out Nigel and Liz’s work in the Arab world, and the EMP Newsletter ceased
publication. As a consequence, those interested in conducting research on medical discourse had to look for new outlets for their publications (Nigel Bruce, personal emailed communication, July 12th 2013)

The research published in the EMP Newsletter and elsewhere in the early 80s was mainly oriented towards solving problems of a pedagogical nature, because the need for assessment was fundamental to EMP curriculum design. That research – based on rather small linguistic corpora – tended to be descriptive, involving statistical (quantitative) analyses of grammar, sentence patterns, and lexis of medical discourse, i.e. a kind of research that is referred to as ‘register analysis’. Salager-Meyer,4,5 for example, analysed a corpus of 100 000 words drawn from 12 medical specialties that enabled her to determine the core lexis of medical articles written in English, i.e. the lexical items that are homogeneously distributed across the medical spectrum, irrespective of the medical specialty. EMP course design studies then became very popular, and a variety of short or intensive EMP courses and tailor-made in-house textbooks saw the light around the world, especially in the Middle East and Latin America. But course-design papers based on these early register studies became scarcer, and EMP research started being more empirical.

Later EMP research on written discourse
I shall start this sub-section by referring to medical word lists. Medicine, as is well known, has a large corpus of technical and specialised terms, mainly borrowed from Greek and Latin. Chung and Nation,7 for example, report that technical/specialised words – i.e. words with a narrow range of occurrence and unknown in general use – account for as much as 37.6% of all word types in an anatomy text, compared to 16.3% in an applied linguistics article. As Ferguson7 rightly argues, specialised vocabulary is better learnt while studying medicine, and the difficulty in understanding it depends, to a great extent, on the learners’ mother tongue and on their level of medical knowledge.

By contrast, there is a general consensus that the semitechnical vocabulary presents the greatest obstacle for intermediate non-native English EMP students; it is thus that part of the medical English lexis that should be emphasised in EMP reading courses. That is why Chen and Ge8 and Wang et al.9 devoted their attention to this semitechnical vocabulary, so as to create an academic medical word list. Wang et al.9 analysed over one million running words from research articles from a wide range of medical specialties and drew a list of 623 word families that account for 12.24% of the tokens making up their linguistic corpus. To our knowledge, the latest lexicographic study that has been conducted on medical discourse is Mungra and Canziani’s academic word list for clinical case histories.10

Regarding generic studies on medical discourse, the most frequently researched genres (or text-types) are the research article abstracts,11–13 research articles per se either from a diachronic perspective14 or from a structural standpoint15–16 and case reports.17–19 Other medical genres, such as book reviews,20 editorials,21 letters to the editor,22 narrative and systematic review articles,23 and the acknowledgment paratext24 received the attention of applied linguists as well, but not to the same extent as the research article and the case report.

Most of these EMP genre studies combined the investigation of a given genre communicative function with the study of certain lexico-grammatical features, but some exclusively focused on a specific feature, such as hedges,25 ‘if conditionals’ across medical genres26 or the expression of criticism27,28 examined from a cross-linguistic, cross-generic, and diachronic perspective.

Summary
Although very brief, this review of the research that has been carried out over the past 30 years on written medical discourse shows how the field has evolved from quantitative analyses of syntax and lexis to more socially-oriented studies. The second part of this review will deal with research conducted on oral medical discourse.

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