

Review Article

Scholarly literature on the lexico-grammatical features of medical case reports - A mini review

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ABSTRACT

Medical case report (MCR) is an important written clinical discourse. Many applied linguists using corpora linguistic approach have identified MCRs to possess lexical and grammatical features that are distinctive, rhetorical, and teachable. The present study reviews scholarly literature published in indexed journals to cull out the salient lexico-grammatical features of MCRs. The identified rhetoric grammatical features were dominant use of past tense, active voice, and the occurrence of semi-technical words such as unique adjectives to bring out the significance of the report, verbs of Latin origin. In countries where English poses challenges, familiarizing on the linguistic features of MCR will enable trainers of medical education programs to develop English language teaching modules to instruct novice medicos in MCR preparation. This initiative could convert English language classes into sessions with meaningful learning experience. Further, publishing MCR is considered to be an important professional research task of clinicians; therefore, this insight will help novice writers to make impressive and genuine case reports.

Keywords: Lexico-grammatical features, Medical case report, Medical education program

INTRODUCTION

Corpus linguistics derives its name from its nature to use corpora to understand the functioning of language. Teubert^[1] defines it as “analysis of language as found in ‘*corpora*’ which consists of huge collection of text samples taken from real-life contexts.” This study of language helps to bring out the distinctive features of a specific genre. In the words of Tognini-Bonelli,^[2] “Corpora linguistics” refers to the compiled version of archived texts, corpora, presumed to have authentic description of the specific language. Usually, it is presumed that corpus comprises language that occurs naturally, cached to serve definite purposes, and is ascertained to carry significant typological features.

The corpora linguistics follows a system or methodology to study language. It retrieves all the frequently used vocabulary from an electronic database and mentions the number of times the word occurs in that corpus. In general, concordancer is a tool that is used to look at words in context of the genre under study. It allows finding out the rhetoric data comprising word strings that are often used.

MEDICAL CASE REPORTS (MCRs) – A SIGNIFICANT MEDICAL GENRE

In the medicine realm, various oral and written communications happen between doctor and patients or

among the medical team. Among the written communication, MCR is a scientific scholarly writing that occupies an important position as it is considered essential for research growth. With growing demand for evidence-based practice, it is a crucial skill for medical practitioners to produce well-written case reports.^[3]

MCR documents important information related to health practice and an important clinical written discourse of physicians.

A MCR can be defined as a detailed description of specific steps that have been taken by clinicians to treat a single patient. It brings out the significant, unique, and interesting clinical features of various medical conditions noticed among patients, which are worth publishing that could furnish revolutionized insight on previously unknown conditions, rare complications of a known disease, or negative interactions of drugs. MCRs have distinctive linguistic qualities which are highly conventional.^[4]

Although MCR offers an excellent opportunity for medical students and junior doctors to strengthen their research domain, they are unprepared for their task. Unless there are preparatory courses on medical and scientific writing in the Medical Curriculum, developing professional writing skills become unattainable.^[5]

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DISCOURSE ANALYSIS OF MCR

Corpus can give us information on a discourse of a specific language. Van Dijk TA^[6] defines discourse as a verbal exchange that includes conversations, dialogue, and written communication inclusive of associated body language that is worth noticing. Discourse analysis observes the communicative function of a language in a social context of ethnographical group and interprets. It has often proved fruitful in providing insights into the relationship between language and ideology. MCRs have been analyzed for their rhetoric features.

LEXICO-GRAMMATICAL FEATURES OF MCRs

Using corpora linguistic approach, many applied linguists have identified MCR to possess lexical and grammatical features that are distinctive, rhetoric, and teachable. The applied linguist, Helán and Jitka,^[7] brings out the significant linguistic nature of case reports. Therefore, the purpose of the present study is to review published articles from indexed journals that had identified lexico-grammatical features of MCRs from the corpus.

Gaining an understanding of these salient vocabulary and grammatical characteristics of MCR will enable English language teachers of medical and paramedical courses to develop applied grammar teaching modules to instruct our novice medicos during their phase. The initiative would convert the grammar classes into meaningful communicative sessions. The teacher can focus on the grammar rules based on these recurrent patterns and embed them into teaching. This will enable them to attain better grammar accuracy and build confidence in the learners. Integration of grammar lessons with vocabulary learning can help learners to view language learning as interdependence of skills. Similarly, publishing MCR is considered to be an important professional research task of clinicians, this insight will help novice writers to make impressive and genuine case reports.

MATERIAL AND METHODS

The present study reviewed open-access journals through Google Scholar search engine and identified 27 articles related to the preparation of MCRs. Out of these 23 were authored by health practioners or editors of high quality case report journals. These articles focused on guidelines for compilation or on selection of cases appropriate for publication. The published data on the linguistic elements of MCR were limited. Out of this scholarly literature, only four articles published in indexed journals had an in-depth explanation on the salient lexico-grammatical features of MCRs so they were chosen. The journal articles selected for review are as follows:

1. “Stylistic features of case reports as a genre of medical discourse,” Lysanets *et al.*^[4]

2. “The use of Latin terminology in MCRs: Quantitative, structural, and thematic analysis” by Lysanets and Bieliaieva^[8]
3. “Analysis of Published MCRs: Genre-Based Study” by Helán and Jitka^[7]
4. “Notes on the Sociology of Medical Discourse: The Language of Case Presentation” by Anspach.^[9]

All these studies have analyzed the textual strings of various MCRs available in repositories using computer programming. The analysis had employed a concordance software tool called TextSTAT for the corpora analysis. The studies of Lysanets^[4,5] have used a set of 15 published MCRs while the rest of them had an equal number of 40 case studies from various specialties written by native English-speaking authors from medical background cited through open-access medical journals and was examined for the most distinctive textual features. The analysis has yielded often used grammatical structures and vocabulary from the case reports.

OVERVIEW OF LEXICO-GRAMMATICAL FEATURES OF MCR

Grammar

Tenses

The corpus-based investigation of grammar by Lysanets *et al.*^[4] elicited predominant use of simple past tense in 23 cases which attribute to the narrative nature of the reports on the past events. The article accounts for the use of present perfect in 180 cases, which are used to bring out the author’s impressions on the wider context of the case dealt with. The usage of past perfect tense was observed to narrate previous happenings before the case handling. On the other hand, the study mentions occasional use of present simple tense and attributes it to its limited utility in the introduction section of the report.^[4]

Illustrations

“The patient’s skin **was** dry, pale, and warm.” (Simple past tense)

“The patient **complained** of shortness of breath and not chest pain.” (Simple past tense)

“She **had commenced** bleeding per vaginum 3 days before admission.” (Past perfect tense)

Voices

The use of active sentences rather than passives was noted as a common occurrence in 309 cases.^[4] Unlike the predominant use of passive voice in much other written communication in the medical genre, here in MCR, the active voice is used to reflect on the author’s experience of handling a case.

Illustrations

“She was treated with high FiO₂s (respirator settings)”^[4]

“The patient was admitted to. the hospital”^[4]

Attributes

Another distinctive strategy prevalent in MCR is the use of “metonymic features” otherwise known as figures of speech. Helán and Jitka^[7] identify the portrayal of medical terms as subjects of sentences. Example – “CT images revealed negative results.” This rules out the doers role of the action and adds objectivity to the details.

Illustration

“The arteriogram showed that this AVM was fed.”^[4]

Lexica

Latin terms

Lysanets and Bieliaieva^[8] highlight the predominant use of terms derived from Latin in anatomical descriptions, physiological, and pathological conditions and in treatment regimens while authoring the MCR. Using illustrations on wrong plural for Latin terms such as “Septum” to “Septae” instead of Septa’ cautions and advocates the need for mastering the use of standardized universally acceptable plurals.

The corporal analysis of MCR done by Helán and Jitka^[7] picks out the use of Latin suffixes and one word root either general or more specific to pathological conditions. The suffixes, “-oma” and “--it is” referred to the inflammation while “-oma” and “-osis” indicative of a growth or a tumor; “-graph” a word root signaling an instrument for measuring or recording something; “-scop” a word root to indicate examining visual using an instrument; and “-tomy” to indicate cutting or an incision of a given organ or part of the body.

Adjectives

Exploring the terminology in MCRs, Lysanets *et al.*^[7] show the distinctive rhetorical use of certain adjectives. The adjectives frequently used were, “acute,” “unusual,” “rare,” “primary,” and “severe.” These adjectives usually take up the initial position in the title to grab the readers’ interest.

Account makers

Clinicians discreetly make assertions of the details presented to them to arrive at the right treatment decision. As keen observers, clinicians look for suggestive words to help them identify factual or non-factual details while a case report is presented. Anspach^[1] identifies account makers as verbs which are used by the speaker either to commit or not to commit to the truth expressed in the clause uttered. These presuppositions help listeners or the readers to determine whether the utterance is factual or non-factual and allows one to understand whether the physicians have trusted or relied on these details. This type of objectifying predictors is another rhetorical lexical feature of case reports. The verbs, “note(d),” “observe(d),” or “find/found” indicates truth. On

the other hand, when presenting information non-factive verbs such as “complain(ed),” “state(d),” and “report(ed)” were commonly used to maintain objectivity. Further, if the clinician suspects the trustworthiness of facts in the information shared by the patient, then the choice of verbs could be “denied.” In the words of Anspach^[1] often “denied” becomes the choice of word when patients do not admit their habit of smoking, alcoholism, and any other suspected secret habits or health signs.

Illustration: (Factual)

“The vagina and cervix were noted to be clear.”^[4] (Since it is the physician’s observation, it is considered accurate)

Illustrations: (Non-Factual)

“She denies tobacco, alcohol, coffee, or tea”^[4] (suggests that the patient may not be telling the truth or may be concealing deviant behavior).

“She denies any dysuria, frequency, or urgency.”^[4] (The patient does not report a larger constellation of symptoms, the others would be likely to have).

CONCLUSION

In countries where English poses challenges, incorporating English language training modules of medical education are of paramount importance. Professional writing skills should be considered as teaching content. Familiarizing on the key linguistic features of MCR will enable trainers of medical education programs to develop appropriate professional writings to prepare novice and young medical practitioners. Here, all the articles under review had cited many extracts from real case reports to substantiate the frequency of these lexical and grammatical usages; these citations can also be used as examples to help novice writers develop familiarity. This initiative could convert English language classes into sessions with meaningful learning experience. At present, the author working as a language teacher in a medical university in India had used the information during the language training sessions of the MBBS preclinical foundation course. Further, publishing MCR being considered an important professional research task of clinicians, making a digital resource such as mobile learning application on English for MCR could have a wider reach and promote learning from anywhere and anytime. This insight will help novice writers to make impressive and genuine case reports.

Declaration of patient consent

Patient’s consent not required as there are no patients in this study.

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Conflicts of interest

There are no conflicts of interest.

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