



Article information

Article Received: 18/10/2024

Acceptance: 29/10/2024

Volume 10, Number 4 (2024)

ISSN: 2395-0595

Indian medical English: A Corpus-based Analysis of Terms Usage and Terminology

Mehulkumar Ambalal Agrawal¹, Dr. Sunilkumar Shah²

¹Research Scholar, Department of English, Veer Narmad South Gujarat University, Surat

²Professor & Research Guide, Department of English, Veer Narmad South Gujarat University, Surat

Abstract

Medical English in India operates at the intersection of globally standardized medical discourse and the multilingual, culturally diverse communication practices of Indian healthcare. In this environment, English functions not only as the lingua franca of medical science and documentation but also as a tool for negotiation, translation, and mutual understanding among healthcare professionals and patients. This has led to the emergence of Indian Medical English (IME), a hybridized linguistic variety that blends technical accuracy with socio-cultural adaptability.

This study investigates IME through an empirical, corpus-based approach using an ethically sourced mini-corpus of authentic medical texts, including prescriptions, discharge summaries, clinical notes, patient instructions, and medical articles by Indian practitioners. Analysis of lexical patterns, collocations, syntactic structures, and pragmatic markers reveals recurrent lexical domains—such as disease terminology, symptom descriptions, diagnostic phrases, and prescriptive directions—that exhibit localized semantic and structural modifications. These adaptations reflect the influence of regional languages, professional demands, and communicative pragmatics.

Findings indicate that IME is characterized by localized phrasemes, code-switching, and semantic hybridization, along with patient-oriented simplifications and culturally grounded metaphors. Recognizing IME as a distinct sub-variety of English for Medical Purposes underscores its pedagogical significance for curriculum design, professional communication training, and inclusive healthcare delivery. Ultimately, this research highlights how global medical discourse is reshaped within India's pluralistic linguistic ecosystem

Keywords: Indian Medical English (IME), English for Medical Purposes (EMP), ESP, corpus linguistics, multilingual healthcare, code-switching, semantic hybridization.

Introduction

Medicine is an applied science, as well as an applied language. The medical field relies on language being used essentially in all diagnoses, treatment and communication as a professional tool, a cognitive tool and a cultural artefact. Medical language serves as a means of conveying scientific information, and it may be used as a means of influencing human interaction between medical practitioners and patients. Of the few languages that have come to dominate the world in this field, English stands at the centre of privilege in terms of medical education, research and practice as *lingua franca*.

The English language is infiltrated with medical diagnostic, documentation and dissemination processes across the globe. It is the language of research papers, conferences, and case studies; hospital records and patient handouts. Nevertheless, position and role of English in medicine are different in sociolinguistic contexts. In a multilingual society like India where many cultures interact, medical English cannot be separated out of the sociocultural facts that inform communication in hospitals, classes, and communities. The linguistic variety of India with number of scheduled languages 22 and numerous dialects forms an abundant yet complicated setting in which healthcare communication is practiced.

To the area, Indian physicians, nurses, and paramedical employees regularly perform their duties in the field of language contact i.e. English coexists and mixes with local languages like Hindi, Gujarati, Tamil, Bengali, Malayalam or Marathi. This multi-linguistic interaction is applicable to not only the ways of communicating medical knowledge in a given language but also in the ways of expressing empathy, teaching and reassurance. The Indian Medical English (IME) is, therefore, anthropomorphised and communicative means in the sense that it is the combination of the international medical vocabulary with localised pragmatic characteristics, idiomatic expressions, and discourse patterns. It is a professional register, as well as a socio cultural product -a global register but local in its operations.

English in Indian Medical and Educational Situations.

The status of English in Indian post-secondary education and professional life has been historically determined and institutionally privileged. English has been the language of instruction in the medical colleges since the colonial era, the language of the medical textbook, and the default language of the publication of international research. However, the Indian students and medical professionals often think, interpret, and communicate using their mother tongues. Patients especially the non-urban ones are usually lacking in English and there is always the need to accommodate linguistically and code-switch in a clinical encounter.

This adaptive communication is in the form of medical bilingualism. Such examples include the retention of technical terms and diagnostic phrases, including blood pressure, dosage, self-administered medication, or postoperative care, and the explanatory and emotional part as well as the follow-up queries in the regional languages. A clinician would write in the file, BP, was observed patient took own medications at the correct time, and then go directly to the patient using, *pain kam hua?* ("Has the pain reduced?").

This elasticity of communication is a good example of the dual linguistic direction of Indian medical practice that is formally oriented towards English, but that is, in fact, functionally absorbed into vernacular expression.

Localized Variety of Indian Medical English.

This localisation and merging of medical standardisms provides Indian Medical English with the unique identity. It is not just a form of British or American medical English re-invented on Indian soil; it is an indigenised and practical form of medical English influenced by local linguistic practices, professional needs and local cultural anticipations. IME contains metaphors that are culturally based, simplified forms to be understood by the lay person, and collocations which are flexible and fit into Indian discourse patterns. Indicatively, the terms like loose motions, gas trouble, fever coming or even BP high-low are usually used in Indian hospitals and are not as per the standard usage of British medical English. These phrases, nevertheless, express well within the local frame of reference and show how English is changing due to functional need.

Research Gap and Corpus Based Analysis necessitate.

Although English is everywhere in Indian medical education and professionalism, the linguistic peculiarities of the language in real communicative practice are not studied in many empirical studies. The majority of the available research is devoted to language pedagogy, communicative competence, and medical discourse training instead of the empirical linguistic study of its real application. Consequently, very little is known about how English, taught in Indian hospitals or in Indian classrooms, deviates and differs with the global standards and what this deviation means, linguistically and pedagogically. In order to fill this gap, the current research uses the corpus-based analytical framework to examine the lexical, semantic, and collocational characteristics of Indian Medical English. The research uses a mini-corpus of medical records, which include prescriptions, discharge notes, and instructions to patients, and scholarly medical texts, to analyze the patterns of usage that are based on practical experience. Corpus linguistics offers a quantitative and objective approach to establish recurring clusters of words, collocations, and semantic frames as well as how language works in practice instead of depending on intuition or normative prescriptions.

Theoretical and Methodological Framework.

Corpus linguistics will be able to provide a quantitative and qualitative analysis of medical English in India. Based on frequency analysis, concordance generation, and collocational mapping, the paper determines the occurrence of lexical sets e.g. names of diseases, treatment verbs, diagnostic nouns etc. and investigates their contextual application. The discussion places IME in more generic frameworks of linguistic variation, specifically the concentric circles of World Englishes that Braj Kachru (1985) uses to categorise Indian English as one of the Outer Circle in which English is a second language institutionalised in education, government and commercial communication. In this paradigm, the Indian Medical English may be regarded as a specialised sub-variety of Indian English influenced by the occupational discourse and cross-linguistic contact.

Communicative and Pedagogic Implications.

Appreciation of IME as an effective and normative language system has broad ramifications on English for Specific Purposes (ESP) and English for Medical Purposes (EMP) curricula. The medical communication training that is currently available in India is usually based on the Western pedagogical models, and focuses on the standard British or American usage. Nevertheless, such models might not be in full response to the linguistic reality of Indian healthcare settings. The design of the curriculum based on empirical results of IME can result in context-sensitive design of medical English, which has international intelligibility and local significance.

In addition to that, the sociolinguistic pragmatics of Indian multilingualism should be considered during the healthcare communication training. The learners (doctors, nurses and students) need to learn how to not only employ the correct medical words but also how to make the transition between languages with sensitivity, meaning how to translate intricate medical terms into a language comprehensible to the culture. Through the focus on real language patterns, corpus-based studies can play an important part in structuring both bilingual communication units and context-based ESP materials.

Research Questions

The following research questions will guide the present study:

1. What are the most common and most clear lexical and terminological features of the Indian Medical English in true medical use?
2. What are the variations between collocational and phraseological patterns between standardised global medical English and Indian Medical English?
3. How do these linguistic characteristics relate to designing the ESP curriculum and health care communication training in India?

Value and Importance of the Research.

This paper places medical English under the specialised and developing field of Indian English studies. Through studying actual linguistic data it enhances our knowledge on linguistic nativisation, register hybridisation and professional discourse adjustment within a multilingual society. The research also broadens the corpus-based research in India by going beyond general or literary corpus to applied professional areas. Finally, it highlights the idea that Indian Medical English is not an aberration or a wrong variety of standard English but a situationally relevant, practical, and effective system of communication, which is worth a scholarly consideration.

In this exploration, the paper proposes a middle way between medical communication, including appreciating linguistic diversity, patient comprehension, and consistent with the national education policy (NEP) 2020 that focuses on multilingualism, applied learning, and relevance to the context.

Review of Literature

English as a medicine English is abbreviated EMP.

English to Measures Purposes (EMP) is a very specific branch of English to Specific Purposes (ESP), which is dedicated to the linguistic, pragmatic, and communicative needs of healthcare and medical education. Hutchinson and Waters (1987) describe ESP as a language teaching method which occurs as a result of the communicative requirements of particular students with a focus on context-based vocabulary, register and discourse conventions. The fact is that EMP adheres to the same principle by focusing on the linguistic accuracy, conciseness and interpersonal sensitivity that is needed in medical communication (Dudley-Evans & St. John, 1998).

The EMP field deals with various communicative situations, such as clinical consultation, medical records, case studies, and writing research papers; each of these situations is regulated by a system of linguistic norms that ensure the accuracy of information, its clarity, and compassion. As an example, Salager Meyer (1994) recognizes rhetoric characteristics of medical research papers, including hedging, objectivity and impersonality, indicators of the epistemic position of the scientific discourse. These stylistic features are not only stylistic features, but they also play epistemological roles, which are to remain guarded, neutral, and distant when reporting evidence.

Candlin and Candlin (2002) further extended the research of Candlin by studying interaction as the relational aspect of the medical interaction, instead of written discourse. They said that good medical communication is not technical accuracy only but it requires interpersonal competence, emotional intelligence and practical awareness of social hierarchies and cultural values. EMP is therefore an extension of linguistic competence to discourse competence and sociocultural awareness. ESP frameworks in multilingual societies such as India should also recognise the phenomenon of code switching, translation equivalence and cross cultural pragmatics. Although trained in English, the medical practitioners tend to have a working environment that is linguistically diverse and therefore the standard EMP models are not universal. Therefore, the creation of localized EMP systems, including Indian Medical English (IME), is a much needed development of the field, where global medical English dynamically interacts with local communicative standards.

Corpus linguistics and terminology.

Corpus linguistics provides a scientific, data-driven approach to the study of the language employed in real-world situations. Corpus methods also depend on large bodies of naturally occurring texts which can be quantitatively analysed in terms of frequency and concordance and collocation patterns (Biber, Conrad, and Reppen 1998). This empirical method allows the researcher to discover linguistic regularities that otherwise cannot be seen due to intuition or prescriptive analysis. Applied to medical English, corpus linguistics enables the researcher to chart professional register and determine specialised phraseology, co-occurrence patterns, and academic discourse organization. Corpora like the British Academic Written English (BAWE) corpus and biomedical repositories like PubMed have been useful in the study of academic and clinical registers (Flowerdew, 2004).

Corpus linguistics, based on keyword extraction and collocational analysis, shows the ways in which words combine to produce lexico-grammatical structures, such as patient was admitted with, symptoms include or treatment should continue until. Nevertheless, these corpora are highly westernised, monolingual and standardised forms of English and provide little information about the medical discourse practice of non-Western cultures. Cultural and linguistic changes which take place in the countries like India where English has to interact with the local languages and communicative expectations are not researched. In addition, the existing literature is more inclined to focus on research writing or academic texts, whereas such aspects of medical English as clinical documentation, prescriptions, and contact with patients are underrepresented in existing literature.

To this end, a corpus-based study of the Indian medical English furnishes a chance to discover the manner in which the global medical English is localised by the use of lexical simplification, code-mixing, and pragmatic adjusting. This investigation would be relevant to both applied linguistics and medical pedagogy as it would demonstrate how the English language is changing due to socio-professional forces of interaction in multilingual medical settings.

Localization and the Indian English.

The term localisation in linguistics is used to denote the process of making a global language more suited to the communicative, cognitive, and sociocultural symptoms of a certain community. The conceptualisation of Indian English is that, as theorized by Kachru (2005) is an institutionalised variety of the second language, typified by systematic deviations, which are rule-governed, and accepted in the social life of the Indian communicative norms. Such deviations are not mistakes but they are a result of nativisation- the reorganization of English to meet local purposes.

Within the medical setting, Indian English has unique lexical, syntactic, and pragmatic peculiarities that are based on the general trends of Indian English. Typical forms are institutionalised collocations, e.g. case sheet, test advised or report awaited. They are not chance phrases but culturally significant and operationally driven words that put the imperative in brevity and procedural explicitness in rush clinical settings. Mukherjee (2009) and Gopinathan (2015) note that these constructions are productive linguistic innovations, which are patterns that mirror localised cognitive schemata and not linguistic shortcomings. Also, politeness in Indian professional English is still distinctively characterized. As Chand (2018) points out, the use of deferential expressions like kindly or please do the needful has remained in use in the field of professional and medical notes. Although these expressions are viewed as archaic in the Western English language, they still continue to be used in India as a sign of respect and social rank. Such forms index politeness in hospitals where seniority and institutional authority are greatly upheld and ensure interpersonal harmony between the staff and the practitioners and between the staff and the patients.

The aspect of localization is also applied to semantic fluctuations and blends. As an example, gas trouble, loose motions, BP high, or fever coming, though not grammatically correct in a Western viewpoint, this serves well as an intelligible culturally embedded expression in Indian language. They represent the blending of the English and the local ways of thinking and conceptualising medicine, which once again supports the idea of IME as a valid linguistic system in the wider context of World Englishes.

Research Gap

Despite the wide scholarly interest in English as a medical language all over the world, the Indian form of medical English is under-studied to an extreme degree. The available EMP research focuses more on western pedagogical paradigms and neglects the linguistic realities of the multilingual clinical environments. The lack of corpus based research on the Indian hospital discourse in actual use, i.e. on prescriptions, case notes, instructions to patients, and medical lectures, has led to little knowledge of how English is used in practice in Indian healthcare.

Moreover, most EMP instructional material in India is based on British or American models with disregard of localised phraseology or bilingual communicative strategies. This forfeit does not just limit the applicability of EMP training but also serves as a detriment to the communicative effectiveness in a real-world doctor-patient relationship, where clarity and empathy matter.

There is, therefore, a need of an empirical, corpus-based study of Indian Medical English (IME). The possible research can help to elucidate the unique lexical, collocational, and pragmatic aspects that define IME, which can provide some practical evidence to reconsider pedagogy, translation practices, and digital health communication. Also, the results can be used to promote computational applications, e.g. speech recognition technology, automated translation systems, and AI-based diagnoses, as applied to Indian linguistic settings.

An attempt at filling this gap is the current study, which focuses on building the Indian Medical Corpus (IndMedCorpus) a meticulously edited and ethically anonymised data holding the authentic language of Indian medical practitioners. By means of extensive quantitative and qualitative research, this paper would detail the linguistic structure of IME and add to the global knowledge of English variation in specialised spheres.

Synthesis of Literature

The analyzed literature as a whole indicates that despite the fact that EMP frameworks have become a mature field of applied linguistics, their Eurocentric nature cannot be used to reflect the multilingualism of such countries as India. Corpus linguistics studies show the strength of empirical methodologies but are limited to a geographic extent. Correspondingly, studies of the Indian English language have elaborated deeply on lexical innovation and pragmatic politeness in communication in general but rarely in technical or medical contexts. Such synthesis provides an interdisciplinary overlap: at the meeting point of medical communication, corpus linguistics, and World Englishes theory. The current study places itself on this cross-over by attempting to suggest that Indian Medical English should be considered to be a valid, rule-based, and pedagogically significant sub-variety of English.

It incorporates corpus-based data and sociolinguistic elucidation in order to express how medical English in India has been indigenised to suit professional and human demands. In this way, this study addresses an empirical gap in corpus linguistics as well as a contribution to the re-conceptualization of the theoretical frontiers of EMP.

References

- Bhatia, V. K. (2004). *Worlds of written discourse: A genre-based view*. Continuum.
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge University Press.
- Candlin, C. N., & Candlin, S. (2002). Discourse, expertise and the management of risk in healthcare settings. *Research on Language and Social Interaction*, 35(2), 115–137.
- Chand, R. (2018). Politeness in Indian English: The case of kindly. *World Englishes*, 37(3), 361–378.
- Dudley-Evans, T., & St. John, M. J. (1998). *Developments in English for Specific Purposes: A multi-disciplinary approach*. Cambridge University Press.
- Flowerdew, L. (2004). The argument for using specialized corpora to understand academic and professional language. *Language Teaching*, 37(1), 29–36.
- Gopinathan, P. (2015). Localization of English in Indian scientific discourse. *Indian Journal of Applied Linguistics*, 41(2), 77–94.
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A learning-centred approach*. Cambridge University Press.
- Kachru, B. B. (2005). *Asian Englishes: Beyond the canon*. Hong Kong University Press.
- Mukherjee, J. (2009). The making of Indian English: A corpus-based study of lexis in Indian newspapers. *ICAME Journal*, 33, 59–79.
- Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes*, 13(2), 149–170.