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Perceptions of medical students on language concordance in doctor-patient communications

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Background & objectives: Language concordance—the ability of doctors to communicate with patients in their preferred language—is known to improve clinical outcomes and patient satisfaction. Medical undergraduates often face communication barriers with patients. This study aimed to assess the perceptions of undergraduate medical students regarding native language proficiency in clinical settings and its impact on doctor-patient relationships.

Methods: A descriptive, questionnaire-based cross-sectional study was conducted among 409 MBBS students across various academic years in Karnataka, to assess students' views on language use in clinical interactions, its benefits, and barriers, using a 5-point Likert scale. Responses were analysed using descriptive statistics and the Kruskal-Wallis test for inter-year comparison. Open-ended responses underwent thematic analysis.

Results: Of the 409 participants, 26.2 per cent were non-native Kannada speakers. A majority agreed that language concordance enhances empathy, rapport, and effective communication with patients. Most students supported the inclusion of local language learning in the curriculum and recognised its role in improving clinical skills such as history-taking. Thematic analysis highlighted key concerns, including patient interaction challenges, clinical skill development, and student-led strategies to overcome language barriers.

Interpretation & conclusions: Medical students perceive language concordance as a vital component of effective clinical communication and patient care. There is strong support for structured, longitudinal local language training within the MBBS curriculum.

Key words Communication barriers - language - medical education - patient satisfaction - Physician-Patient Relations - students

Language concordance, the ability of a primary care physician to be proficient in patients' preferred language, is vital for effective communication¹. It improves patient satisfaction, healthcare outcomes, and fosters empathy, emotional closeness, and reciprocal trust, creating stronger therapeutic relationships and enhancing overall quality of care²⁻⁴.

English being the primary medium of medical education leaves students under confident in communicating with local patients. To address this, the competency-based medical education includes local language training, yet non-native students continue to face challenges due to persistent language barriers. Few Indian studies explore non-native medical students'

Table I. Key perceptions of medical students on language concordance (n=409)

Domain	Statement	Agree/Strongly agree, n (%)
Empathy & rapport	I empathize with the patients I interact with more if I use the language they prefer.	317 (77.5)
Impact of language barriers	Language barriers will nullify the interaction, even if the student has strong communication skills.	272 (66.6)
Trust and connection	Doctors build better trust and emotional connection with the patients if they communicate in the native language of the patient.	378 (92.4)
Clinical understanding	My understanding of patients has improved after repeated interactions as I've learned their local language.	289 (70.6)
Curriculum inclusion	Medical students need to learn native languages as a part of their curriculum.	288 (70.4)
Benefit of training	If done right, I will find Language classes beneficial for my clinical interactions with patients.	318 (77.8)
Impact on learning	Quality of learning (like history taking) in the clinic is compromised due to a lack of language proficiency.	312 (76.3)
Stress & workload	Language barriers create stress and work burden for doctors and students interacting with them.	308 (75.3)
Disadvantages of language barriers	Non-native medical students and doctors are at a disadvantage working with translators.	255 (62.3)

perceptions of local language use and its necessity. A study⁵ from Kolkata found that orientation classes in local languages during the foundation course improved students' confidence and communication effectiveness. Similarly, a study⁶ in Saudi Arabia identified language constraints as barriers to clinical experience, impacting patient care, empathy, professionalism, and learning. It recommended advanced occupation-related Arabic language courses to enhance doctor-patient interactions and facilitate communication between non-native medical students and native patients, emphasising the importance of structured language training in medical education⁶.

In India's multilingual setting, promoting local language proficiency among medical graduates may enhance communication, foster linguistic diversity, and improve patient care quality, leading to better health outcomes through effective interaction. Rapport building between the patient and physician should effectively lead to patient satisfaction. This present study addresses the gap in understanding medical students' perceptions of language concordance in doctor-patient communication. It gives an insight into whether local languages should be taught to medical students only in the foundation course or throughout the MBBS course till they become proficient in communicating with patients in the local language.

Materials & Methods

This cross-sectional study was undertaken by the department of Biochemistry, Father Muller Medical

College, Mangaluru, Karnataka, India. This study was approved by the Institutional Ethics Committee. Voluntary electronic informed consent was obtained from all study participants, and confidentiality of the data collected was maintained.

Study design and participants: The study, conducted from January to March 2024, was a descriptive, questionnaire-based survey involving 409 consenting undergraduate medical students from various medical colleges across Karnataka. Participants included both native and non-native, Kannada and non-Kannada speakers. A validated questionnaire, developed after expert review and a pilot study with 20 students, assessed perceptions regarding the need for local language proficiency, willingness to learn, barriers to communication, and the role of language concordance in healthcare. It also explored views on integrating language training into the curriculum. Responses were recorded on a 5-point Likert scale (ranging from strongly disagree to strongly agree), with an option for participants to provide open-ended feedback. Data collection and analysis were conducted using Google Forms to ensure accuracy and minimize paper use.

Statistical analysis: The perceptions on the Likert scale are expressed as a percentage of students. Open-ended remarks are subjected to thematic analysis in accordance with the six-phase approach (Braun and Clarke)⁷.

Table II. Themes and sub-themes from thematic analysis of responses on language interactions

Theme	Sub-themes
Problems in patient interaction	<ul style="list-style-type: none"> • Difficulty in empathising with patient: understanding emotions, better response with native language, translators prevent empathetic connection • Quality of care reduced • Difficulty in developing trust; inability to connect deeply • Easier for native speakers to build rapport • Reliance on translators (peers/online) causes dependency, inefficiency, miscommunication • Online translators lack human interaction quality • Information lost in translation; time-consuming, irritating for patients • Language barriers nullify interaction despite strong communication skills • Language barriers create stress and workload
Development of clinical skills	<ul style="list-style-type: none"> • Difficulty taking history, especially sensitive questions • Compromised clinical learning due to language gap • Fewer patient interactions • More time spent on physical examination • Reliance on peers' notes, case files, and interns for history
Managing and overcoming language barriers	<ul style="list-style-type: none"> • Dependency on colleagues and staff • Studying patient case files • Orientation classes in foundation course boost confidence • Curriculum must include native language learning
Student recommendations to overcome barriers	<ul style="list-style-type: none"> • Need for a medically tailored native language for history taking • Language classes from the II year onward • Clinical skills training in the native language • Use of external resources • Native language proficiency test • Voluntary flexible language courses • Buddy system in clinics • Role-playing scenarios • Peer-led language classes in small groups for personalized learning

Results

We surveyed 409 MBBS students across all phases, including 107 (26.2%) non-native and 302 (73.8%) native speakers from various medical colleges. Analysis of the questionnaire and open-ended responses revealed key challenges and perceptions among the participants (Table I).

The thematic analysis highlighted four interconnected themes—problems in patient interaction, development of clinical skills, managing and overcoming language barriers, and student recommendations (Table II)—each underscoring the central role of language concordance in shaping students' clinical learning and patient care experiences.

A major issue for non-native students is difficulty empathising with patients, worsened by linguistic barriers that hinder emotional understanding and appropriate responses, especially when relying on translators like peers. As one student stated,

'Translators are effective for the doctor, but it doesn't help build a good relationship with the patient. It disrupts the fluency of the conversation.' Consequently, trust-building becomes difficult, and the quality of care suffers without language concordance⁸⁻¹⁰. Native speakers find it easier to establish rapport, while non-native speakers face dependence on translators, risking miscommunication and time inefficiency. Though online translators provide some efficiency, students reported that they cannot replace human interaction. Many felt information is often lost in translation, as another shared, '.....certain things the patient says are said in a way that could only be accurately comprehended in that language. Getting the information second hand brings in the issue of exaggerated info.' Empathy, a critical element in therapeutic connections and doctors' interpersonal effectiveness¹¹, is often compromised when translators are used⁸. As one participant explained, '.....Translators may not be able to fully translate the patient's feelings, which is and

also patient would feel more comfortable sharing more information integral in making a diagnosis to someone who speaks their language.' Students concluded that language barriers can nullify interaction even when communication skills are strong. Furthermore, these barriers increase stress and workload for students and healthcare professionals, ultimately compromising patient experience and overall quality of care.

Discussion

Clinical years provide essential skills and practical experience, preparing them to transition effectively into real-world clinical environments, but language barriers turn active learning into passive observation, reducing clinical competency and the quality of learning⁶. Non-native speakers face major challenges in history-taking, particularly asking sensitive questions. These barriers limit patient interactions, with more time spent on physical examinations due to the inability to converse effectively. Students also reported reliance on case histories from peers or patient files in English, reducing focus on direct history-taking—an essential component of skill development. Such limitations compromise experiential learning and overall clinical proficiency.

Managing language barriers often involves relying on colleagues and reviewing patient case files, but students emphasised some proactive strategies. Kannada and Hindi are taught in Karnataka to medical students in the first phase only as a part of the Foundation Course. These orientation classes improve confidence; however, participants felt these were inadequate, focusing on grammatical essence rather than clinical use. They advocated integrating language training throughout the curriculum for better communication and patient care. This highlights the need for sustained medically oriented language education across all MBBS phases to empower clinical interactions.

To address language barriers, students proposed several recommendations aligned with their clinical experience. They stressed the need for medically tailored native language training to improve history-taking and communication. Language classes should begin in the second year, with a longitudinal, medically oriented, voluntary course in the first 2–3 yr for proficiency, aligning with students' growing appreciation of language concordance in the healthcare setup. Integrating clinical skills classes in the native language enhances practical competence. External resources, such as YouTube videos in the native

language for history-taking and examination, can complement learning. Suggestions included a native language proficiency test, voluntary flexible courses, and a buddy system in clinics for peer support. Role-playing scenarios were emphasised. Peer-led language classes in small, personalised groups² and simulated patient interactions were also recommended, supported by evidence that simulated patients enhance clinical skills^{11,12}. These comprehensive strategies, combining formal and informal learning, aim to empower students to overcome language barriers and improve professional practice in multilingual healthcare settings.

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References

1. Eamranond PP, Davis RB, Phillips RS, Wee CC. Patient-physician language concordance and primary care screening among Spanish-speaking patients. *Med Care* 2011; 49 : 668-72.
2. Ismaiel S, AlGhafari D, Ibrahim H. Promoting physician-patient language concordance in undergraduate medical education: A peer assisted learning approach. *BMC Med Educ* 2023; 23 : 1-9.
3. Finset A, Ørnes K. Empathy in the clinician-patient relationship. *J Patient Experience* 2017; 4 : 64-8.
4. O'Grady C, Dahm MR, Roger P, Yates L. Trust, talk and the dictaphone: Tracing the discursive accomplishment of trust in a surgical consultation. *Discourse & Society* 2014; 25 : 65-83.
5. Biswas DS, Mahakalkar DC, Chakraborty DS. Efficacy of orientation classes in local languages as a part of foundation course in new competency based medical education curriculum. *IJSRP* 2021; 11 : 495-50.
6. Sheikh AM, Sajid MR, Bakshi EN, Khan AU, Wahed MM, Sohail F, *et al*. The perceptions of non-native medical students towards language barrier on clinical teaching and learning: A qualitative study from Saudi Arabia. *Med Sci Educ* 2022; 32 : 865-72.
7. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3 : 77-101.

8. Ngo-Metzger Q, Sorkin DH, Phillips RS, Greenfield S, Massagli MP, Clarridge B, *et al*. Providing high-quality care for limited English proficient patients: The importance of language concordance and interpreter use. *J Gen Intern Med* 2007; 22 : 324-30.
9. Dorgan KA, Lang F, Floyd M, Kemp E. International medical graduate–patient communication: A qualitative analysis of perceived barriers. *Acad Med* 2009; 84 : 1567-75.
10. Ha JF, Longnecker N. Doctor–patient communication: a review. *Ochsner J* 2010; 10 : 38-43.
11. Derksen F, Bensing J, Lagro-Janssen A. Effectiveness of empathy in general practice: A systematic review. *Br J Gen Pract* 2013; 63 : e76-84.
12. Williams B, Song JJY. Are simulated patients effective in facilitating development of clinical competence for healthcare students? A scoping review. *Adv Simul (Lond)* 2016; 1 : 6.

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