

Challenges of Non-Vernacular students in history taking using Standardized Patients: A Mixed Method Study

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Abstract:

Background: For a good doctor-patient relationship, communication is an important and vital skill to be imparted from student period onwards. For communication to be effective, the non-vernacular students should be trained properly to create rapport and for accurate history taking. The importance of using standardized patient in history taking lies in the fact that they augment a variety of medical conditions flawlessly. **Methods:** A mixed-method study included second-year undergraduate medical students who were non-vernacular speakers (n=112) and standardized patients (SPs) (n=10), using a universal sampling method. After obtaining informed written consent, data collected from participants in face-to-face interviews with the questionnaire and focus group discussion was conducted for qualitative part. **Results:** Majority (89%) were of age from 21 to 24 years, 88% were of Hindu religion and 56.3% were females. About 38% of the students used google translator for the history taking but among them only 4.5% felt it was completely useful. Only 0.9% felt that he/she extracted all the information necessary for the case. About 23% felt that apart from basic demographic details they found difficult in extracting details like personal and past history. **Conclusion:** This study found that the non-vernacular students found it difficult to communicate with standardized patients in history taking. Considering their duration of stay and for better learning outcome, it is imperative to have appropriate training for effective communication with patients for the non-vernacular students.

Keywords: medical education, history taking, language barrier

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Introduction:

Training of medical students for history taking is considered as an important component of medical curriculum. Different types of methods are practiced to train the medical students namely interviewing with real patients, role playing and use of standardized patients. Standardized patient is defined by Association of standardized patient Educators as a person trained to simulate a patient accurately, including health history, a health concern, clinical symptoms, and communication while providing evaluation and feedback to the student with the use of a checklist.¹ Application of standardized patient in medical education will be a cost effective teaching and evaluation method especially in countries like India. The importance of using standardized patient

in history taking lies in the fact that they augment a variety of medical conditions flawlessly. According to Giesbrecht et al, standardized patients were perceived as an important tool in enhancing self confidence among students.² According to Kraemer et al, early exposure of students to standardized patient in preclinical context will improve students communication skills to a greater extend.³ With the background reality of India being a multi-linguistic nation, and students of different mother tongue studying throughout the nation, there is a need to train in the local language to learn medicine effectively. For communication to be effective, the non-vernacular students should be trained properly to create rapport and for accurate history taking. Further, there were minimal literature addressing the language barrier in medical

education, hence, this study was planned to identify the challenges of non-vernacular students in history taking using standardized patients.

Materials and Methods:

A mixed-method study was conducted in the Department of Community Medicine of a medical college in Chennai and included second-year undergraduate medical students who were non-vernacular speakers (n=112) and standardized patients (SPs) (n=10), using a purposive sampling method. A pre-validated, semi-structured questionnaire was employed for quantitative data collection, while a Focus Group Discussion (FGD) guide was used to explore challenges faced by students and SPs. Approval from the Institutional Ethics Committee (IEC) (no: 2023/699) was obtained before starting the study.

After obtaining informed written consent, students participated in face-to-face interviews with the questionnaire, which collected demographic details and documented their experiences with SPs during history-taking sessions. FGDs were conducted with groups of 6–8 students until data saturation to identify specific communication challenges. For SPs, data were collected in two phases: an initial schedule documented immediate concerns, followed by FGDs to explore challenges encountered when responding to students' queries. All the FGDs were independently conducted by the Principal Investigator to ensure confidentiality and minimize bias. Quantitative data were analyzed using SPSS software version 23, with frequency distributions and Chi-square tests performed to assess associations, considering statistical significance at $p < 0.05$. Qualitative data from FGDs were audio-recorded, transcribed, coded, and analyzed thematically to generate key insights into communication challenges faced by both students and standardized patients.

Results:

About 25% were from Kerala, 13% from Andhra Pradesh, 10.7% from West Bengal and remaining were from Telangana, Karnataka, Gujarat, Delhi, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Odisha, Uttar Pradesh and North Eastern States. Majority (89%) were of age from 21 to 24 years, 88% were of Hindu religion and 56.3% were females. Malayalam, Telugu, Hindi and Bengali were the major mother tongue spoken by the participants and only 8% of the participants converse effectively in Tamil language as shown in table 1.

About 88% of the students got the help of the students who knew Tamil better. The table 2 shows the situations where the non-vernacular students received help from Tamil speaking peers. About 38% of the students used google translator for the session but among them only 4.5% felt it was completely useful.

About 40% completed their history taking between 20 to 30 minutes. About 23% felt that apart from basic demographic details they found difficult in extracting details such as presenting illness, Past history, Personal history, Family history, Socio-economic history, Menstrual history, Obstetric history, Treatment history, immunization history, developmental history, diet history and environmental history. Only 0.9% felt that he extracted all the information necessary for the case.

In the study population, 23 (50%) students from north and 23 (50%) students from south states have taken 15 to 30 mins to complete history taking, and > 45 mins was taken by 8 (89%) students from north states and association was not statistically significant as shown in table 3.

The Association between students from various states and their ability to converse effectively in local language showed that 6 (67%) students from southern states had the ability to converse Tamil effectively to standardised patients. 39 (52%) students from northern states shown that they were unable to converse effectively with standardised patients and it was not statistically significant as shown in the table 4. Further, about three fourth students used sign language to convey information with standardised patients and among them 80% felt that they somewhat understood the sign language for which they were enquiring.

Qualitative part:

Non-vernacular students encountered significant challenges during history taking with standardised patients. Time management was not possible due to language barriers. Other challenges included understanding patient narratives, conveying information without frequent pauses, and ineffective use of translation tools. Communicating sensitive topics were challenging and psychologically, students perceived patient discomfort and experienced hesitancy in history-taking. Linguistic limitations involved inadequate vocabulary, difficulty translating medical terminology, and confusion between phonetically similar words, ultimately impairing effective communication and rapport with patients as seen in table 6.

Theme: Challenges enumerated by the non-vernacular students:

Category 1: Time Constraints

Participants expressed that clinical encounters were often delayed due to language gaps, which made consultations take significantly longer compared to their peers who were fluent in Tamil.

One student shared, "I take more time than other students because I keep searching for the correct word, and I thought the patients might get frustrated."

Category 2: Difficulty in Understanding the Patient

Many participants reported difficulties in understanding patient responses, particularly when patients used local dialects or colloquial expressions that were unfamiliar. Pauses in conversation and attempts to seek clarification resulted in a communication breakdown, at times causing patients to lose interest or stop engaging.

One participant mentioned, "I was trying to form the sentence, but there were so many pauses... the patient eventually just gave up and kept quiet." Another student remarked, "I tried to use Google Translate, but the words it gave me were traditional Tamil. Even the patient couldn't understand them."

Category 3: Communication Skills

Students acknowledged that effectively conveying questions and information in a way that patients

understood was a challenge. This was especially evident when discussing sensitive subjects such as menstrual history or sexual history, where language precision and comfort were essential.

One male student noted, “I wasn’t able to ask about her last menstrual period comfortably in Tamil. I just didn’t know how to frame it sensitively.” Another added, “Talking about personal topics felt more awkward because I didn’t know the appropriate Tamil terms.”

Category 4: Psychological Impact

The language barrier appeared to negatively affect students’ confidence and comfort during clinical encounters. Participants reported sensing a lack of openness from patients and often hesitated to initiate or continue conversations because of their perceived inadequacy in the local language.

One participant shared, “The patient was tensed, and I felt he wasn’t comfortable with me just because I wasn’t speaking Tamil.”

Another reflected, “I often hesitate to even start the case history if I know the patient doesn’t speak English or Hindi.”

Category 5: Limitations in Linguistic Ability

Participants admitted to only having basic Tamil proficiency required for opening greetings or casual interaction, which left them struggling when deeper medical communication was necessary. A recurring difficulty was the inability to find exact Tamil translations for medical terminology, leading to search for approximate words or stopping the conversation altogether.

A student stated, “I know how to ask the patient if they have pain or fever... but I can’t go beyond that....”

Another participant said, “I get confused with Tamil words that sound almost the same but mean different things... it’s stressful.”

Standardized patients observed several challenges among non-vernacular students during history-taking sessions. The time required to collect patient histories was notably longer when compared to students who knew the local language. Students demonstrated difficulty in understanding patient complaints due to language barrier and exhibited deficiencies in listening skills and comprehensive history-taking. Cultural aspects were under-explored. Linguistically, students faced pronunciation difficulties and lacked spontaneity. Additionally, a noticeable lack of confidence was evident, further influencing the quality of interactions as shown in table 7.

Theme 2: Challenges enumerated by the standardised patients on the non-vernacular students:

Category 1: Time Management

Standardized patients consistently observed that non-vernacular students required more time to complete history-taking during encounters. This was often due to the additional effort students had to exert to construct questions in Tamil or clarify patient responses.

One standardized patient remarked, “They [non-vernacular students] take a lot more time to finish

history. I would sit for long stretches just waiting for the next question to come.”

Category 2: Understanding Skills

Many SPs expressed frustration that non-vernacular students often failed to comprehend their responses. This difficulty led to disjointed conversations and sometimes irrelevant follow-up questions, hampering the flow of the clinical dialogue.

As one SP shared, “I told them my issue clearly, but the student didn’t understand and kept asking the same thing again and again in different ways.”

Category 3: Communication Skills

Inadequate listening and less effective history-taking were recurring themes. SPs felt that the non-vernacular students didn’t listen actively and often missed important contextual or symptomatic cues that local students might have picked up.

One participant noted, “They weren’t really listening... I could see they were just waiting to ask the next question.” Another added, “Compared to Tamil-speaking students, these students left out many questions when taking my history.”

Category 4: Cultural Awareness

Standardized patients reported that non-vernacular students often failed to explore cultural and traditional practices relevant to the patient’s health, such as the use of local remedies or specific dietary habits. In comparison, local students were more adept at inquiring about these culturally rooted behaviors.

A participant reflected, “They didn’t ask me anything about my home remedies or local medicine we use regularly... Tamil students usually ask that right away.”

Category 5: Linguistic Skills

Pronunciation issues and the lack of fluency in the local language were highlighted by SPs as major barriers. Responses felt unnatural, broken, and often required repetition or clarification. These instances disrupted the consistency of the encounter and made the SPs less inclined to open up.

One standardized patient said, “Their pronunciation makes it hard to understand sometimes. I had to guess what they were asking.”

Another stated, “There was no flow... they spoke very slowly and seemed unsure of every sentence.”

Category 6: Personality Traits

Lack of confidence among non-vernacular students was noticed by many SPs. Participants felt that this nervousness made the interaction less engaging and impacted the student’s ability to direct the conversation or build rapport.

An SP expressed, “I could immediately sense their hesitancy... they weren’t confident, and that made me hold back too.”

Coping strategies adapted by the students to handle difficult situation due to language barrier in handling standardised patients were trying to learn local language, seeking peer help who knows the language well, using of sign language, practicing history taking with peers who knows local language and correcting their mistakes

Discussion:

This study explored the challenges faced by non-vernacular second-year undergraduate medical students

in history-taking sessions involving standardized patients (SPs) in a South Indian medical college. A key finding was that despite some students attempting to overcome language barriers using tools like Google Translate, only a minuscule proportion (4.5%) found it completely useful, and just 0.9% could extract all necessary information during the interaction. These results align with a growing body of evidence highlighting the impact of language and communication barriers in clinical training environments.

The findings resemble the outcome seen in a study by Lal et al, who explored language barriers among medical students during clinical rotations in Peshawar.⁴ They found that language mismatches could significantly hamper student's ability to gather accurate and complete patient histories. Similar to our findings, they reported that students often relied on translation tools or peer assistance, which only partially addressed the communication gap and sometimes introduced new challenges, such as misinterpretation or delays in clinical interactions.

Moreover, the low perceived usefulness of digital translators in our study aligns with the findings of Vanamali et al, who assessed language proficiency among first-phase MBBS students. They noted that over-reliance on translation apps often resulted in superficial understanding and inadequate communication, especially when dealing with nuanced or culturally sensitive histories. This further underscores the need for structured language and communication training tailored to regional languages in the early stages of medical education.⁵

Interestingly, our study found that 23% of the students faced challenges beyond obtaining demographic details, particularly in personal and past history segments. These concerns are reflective of those observed by Du et al, who investigated nursing undergraduates using Virtual Standardized Patient (VSP) platforms in China. They similarly reported that students struggled most with probing into sensitive or detailed areas of the clinical history, especially when faced with language limitations or lack of cultural context.⁶ The similarity between our real life SP findings and their VSP-based findings suggest that language and contextual understanding remain essential regardless of simulation format.

Furthermore, the effectiveness of communication skills training using standardized patients has been explored extensively in the literature. Giesbrecht et al. noted that SPs provide a safe and controlled environment for students to practice and receive feedback, emphasizing the development of not only technical communication but also empathy and fluency.² However, in our study, it became evident from the qualitative data that SPs experienced difficulty responding to students queries due to frequent breakdowns in communication, likely because of language incompatibility. This concern resonates with Blatt et al, who found that SPs often harbored unvoiced concerns about student performance, particularly relating to warmth, clarity, and responsiveness which were influenced by language proficiency and cultural familiarity.⁷

Additionally, Zerilli et al, demonstrated that multiple encounters with SPs significantly improved history-

taking skills in pharmacy students.⁸ Kapoor and Badyal highlighted the value of SPs in competency-based education post-COVID-19, suggesting that such simulations should be normalised in Indian medical curriculum.⁹ Our study contributes to this dialogue by identifying a crucial gap, while SPs are indeed beneficial, their utility is compromised in the absence of adequate language or communication training, particularly for non-vernacular speakers. When left unaddressed, these barriers affect student performance, SP satisfaction, and ultimately patient care quality in real-world settings.

Kraemer et al, observed rapid improvement in communication competencies when pre-clinical students were exposed to early SP interactions. However, such gains depended heavily on the presence of structured feedback and language sensitive guidance, which reinforces the importance of contextualising SP-based learning, especially in multilingual environments.³ Our study supports their findings and calls for a redesign in early clinical education to include language acquisition as a core component.

Additionally, studies like that by Narayan on healthcare language barriers in India have emphasized the systemic nature of this issue. Language is not only a medium of communication but a bridge to building trust and cultural alignment.¹⁰ Our results where only a small fraction of students could claim full understanding and history extraction reflect this systemic challenge and reiterate the necessity for institutional interventions.

Lastly, Lavanya et al, demonstrated successes in improving advanced communication skills using SPs when paired with structured simulation-based interventions.¹¹ This contrasts with the ad hoc methods employed by students in our study, such as using google translate. Their findings reinforce that while SP-based training is effective, it must be paired with targeted, language-sensitive pedagogical strategies to yield optimal results.

Conclusion:

This study found that the non-vernacular students in their early clinical training found it difficult to communicate with standardized patients in history taking. This study highlights the urgent need for curriculum reform to incorporate sustained effective language and cultural training programs for medical students to overcome the language barrier in medical education. Comparison with multiple studies across India and internationally reinforces our findings that students struggle to obtain complete and accurate histories when they lack proficiency in the patient's language. Addressing this requires integrating language training, structured feedback, and culturally contextualized learning modules into the curriculum. Without such interventions, the pedagogical efficacy of standardized patients may be limited for a significant subset of students, particularly non-vernacular speakers.

Conflicts of interest: None

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Parameters		N	%
Age	21-24 years	100	89.29
	< 20 years	12	10.71
Gender	Male	49	43.75
	Female	63	56.25
Religion	Christian	3	2.68
	Hindu	99	88.39
	Muslim	9	8.04
	Others	1	0.89
Mother tongue	Bengali	12	10.71
	Gujarati	3	2.68
	Hindi	23	20.54
	Hindi, English	2	1.79
	Hindi, Gujarati	1	0.89
	Kannada	6	5.36
	Malayalam	28	25
	Manipuri	1	0.89
	Marathi	5	4.46
	Odia	6	5.36
	Punjabi	1	0.89
	Telugu	24	21.43
Ability to converse effectively in local language	No	74	66.07
	May be	29	25.89
	Yes	9	8.04

Table 1: Socio-economic status of the participants (N=112)

Table 2 : Factors affecting the history taking with standardised patients (N=112)

Parameters		N	%
Opportunity to interact with standardised patients before	Yes	89	79.46
	No	23	20.54
Frequency of interactions with standardised patients before	> five times	6	6.74
	2- 4 times	53	59.55
	Once	30	33.71
Average time taken for completing history taking from standardised patients	< 15 mins	34	30.36
	15-30 mins	46	41.07
	30-45 mins	23	20.54
	> 45 mins	9	8.04
Satisfaction of extracting all information from the patients	Very much satisfied	1	0.89
	Completely satisfied	1	0.89
	Moderately satisfied	36	32.14
	Slightly satisfied	37	33.04
	Not at all satisfied	37	33.04
Usage of sign language to convey the information with standardised patients	Yes	46	41.07
	May be	36	32.14
	No	30	26.79
Understanding of sign language & replied effectively by standardised patients	Yes	16	34.78
	May be	26	56.52
	No	4	8.7
Usage of google translator during history taking	Yes	26	23.42
	May be	16	14.41
	No	70	62.5

Table 3: Association between non vernacular students and time taken for history taking with standardised patients:

	Time taken for completing history taking [N(%)]				P value
	<15 mins	15-30 mins	30-45 mins	> 45 mins	
North state students	14 (41.18)	23 (50)	9 (39.13)	8 (88.89)	0.058
South state students	20(58.82)	23 (50)	14 (60.87)	1 (11.11)	

Table 4 : Association between non vernacular students and ability to converse effectively in local language with standardised patients:

	Ability to converse effectively in Tamil Language[N(%)]			P value
	Yes	May be	No	
North state students	3 (33.33)	12 (42.86)	39 (52)	0.468
South state students	6 (66.67)	16 (57.14)	36 (48)	

Table 5: Situations where the non-vernacular students getting help from Tamil speaking peers

Situations	%
Kept the translator (Tamil student) for the entire session with you and he/she only conveyed the information on behalf of you	60.7%
When the Standardized patient didn't understand what I was conveying to her	11.6%
Only when there was a need I used peer translators	17%

Conveying difficult medical terminologies with the patient	7.1%
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Table 6: Challenges enumerated by the non-vernacular students:

Theme	Category	Code
Challenges enumerated by the non-vernacular students	Time	- Consume more time than peers who knows Tamil better
	Understanding ability	- Difficulty in understanding what the patient conveys - Conveying with too many pauses and ultimately patient were not replying properly - Patient did not understand the words from Google translator which was in traditional language
	Communication skills	- Didn't able to tell in the way the patient could understand - Difficulty to communicate sensitive topics like sexual history/ menstrual history
	Psychological aspects	- Felt that the patient was tensed and freely communicating with me as I was not conversing with her/him in Tamil language - Hesitancy to initiate or continue history taking

Theme	Category	Code
	Linguistic skills	- Inability to convey the medical terminologies to the patient in the local language - Only knew basic conversation in Tamil and felt difficult to find Tamil words for enquiring detailed history - Finding difficulty in continuing conversation - Searching for appropriate words - Difficulty in getting hold of specific words which pronounce almost same but are of different meanings

Table 7: Challenges enumerated by the standardised patients on the non-vernacular students:

Theme	Category	Code
Challenges enumerated by standardised patients on the non-vernacular students	Time	- Time taken for collection of history was more
	Understanding skill	- Student did not understand what they tell
	Communication skills	- Lack of listening skill - Deficit or deficiency in history taking comparatively seen more among non vernacular students
	Cultural aspects	- Local cultural practices were not explored by

Theme	Category	Code
		non-vernacular students compared to local students
	Linguistic skills	- There was more pronunciation difficulty - Lack of spontaneity
	Personality	- Lack of confidence