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Research Article

Communication Strategies in a Medical Setting: Overcoming Language Barriers at the Pain Clinic of RSUD Genteng Banyuwangi

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Abstract: This study investigates doctor–patient communication strategies in overcoming verbal and non-verbal language barriers within the Pain Clinic of RSUD Genteng Banyuwangi, a public hospital in East Java, Indonesia. Pain clinics pose unique communicative challenges, as patients often struggle to express their discomfort clearly due to limited health literacy, cultural norms, or emotional inhibitions. This research aims to identify and analyze the communicative methods employed by doctors to facilitate accurate information exchange and build therapeutic rapport with patients experiencing chronic pain. Utilizing a qualitative approach, this study applies Conversation Analysis (CA) to naturally occurring doctor–patient consultations recorded through non-intrusive video methods. Verbal and non-verbal interactions were transcribed and analyzed to uncover recurring communicative patterns. The data were interpreted through sociolinguistic and pragmatic lenses to account for the local language diversity and cultural context of Banyuwangi. Findings reveal that doctors employ multiple strategies to clarify meaning and adapt communication: repetition, strategic questioning, utterance correction, and linguistic adaptation. Additionally, doctors interpret and respond to patients' non-verbal cues, including vocal tone, facial expressions, and body gestures, to supplement incomplete verbal communication. These strategies not only enhance diagnostic accuracy but also promote empathy, trust, and patient-centered care. The study concludes that effective communication in pain clinics must account for linguistic diversity, cultural sensitivities, and emotional dynamics. Adaptive and empathetic communication fosters better understanding, reduces the risk of diagnostic error, and improves treatment outcomes. The findings offer practical implications for clinical training and healthcare policy, particularly in multicultural and linguistically diverse settings.

Keywords: doctor–patient communication; language barriers; communication strategies, pain clinic; conversation analysis; medical pragmatics

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1. Introduction

Communication is a fundamental element in healthcare practice, particularly in establishing effective relationships between doctors and patients. Within the medical context, smooth and clear communication is essential to ensure the anamnesis process proceeds effectively. As the initial stage in gathering medical information from patients, anamnesis relies heavily on openness and clarity in communication. Language barriers can significantly hinder this process; doctors may struggle to obtain accurate anamnesis, while patients may receive incomplete or misleading information about their condition and its management [1]. Conversely, when communication is effective, physicians are more likely to gather comprehensive and accurate subjective data, which serves as a crucial foundation for making an accurate diagnosis [2]–[4].

Conversely, when communication between doctors and patients is hindered, the process of obtaining medical information can be significantly disrupted. For instance, patients may struggle to clearly articulate their symptoms due to language barriers, fear, or limited medical understanding [5], [6]. On the other hand, physicians who are unable to establish a comfortable rapport or who use complex medical terminology may inadvertently discourage patients from speaking openly. As a result, the information gathered may be incomplete or inaccurate, thereby compromising the quality of the clinical assessment.

Such conditions can have serious consequences, including diagnostic errors and the administration of inappropriate medical treatment [7], [8]. For example, a patient who fails to disclose a history of allergies, perhaps because they were not directly asked, may be prescribed a medication that poses significant health risks. This illustrates how communication barriers can undermine the effectiveness and efficiency of healthcare delivery [8]–[10]. Therefore, it is essential for healthcare professionals to develop strong communication skills to ensure high-quality care and safeguard patient safety.

Communication barriers in the medical setting can manifest in various forms. One of the most common is language discordance, where patients and healthcare providers do not share a common language or dialect. In addition to linguistic differences, cultural background disparities [11], low levels of health literacy among patients, the use of medical terminology that is difficult for patients to understand, and psychological factors, such as fear, anxiety, or embarrassment which can further hinder effective communication [9], [12], [13]. Moreover, time constraints during consultations and the heavy workload faced by healthcare professionals can exacerbate the risk of miscommunication, making it even more challenging to ensure accurate information exchange and effective care.

Previous studies have consistently shown that communication barriers in medical settings negatively affect patient care outcomes. These studies indicate that miscommunication can lead to diagnostic errors, reduced patient adherence to treatment, and higher levels of dissatisfaction with healthcare services [7], [10]. Over time, such issues not only harm patients on an individual level but also contribute to the deterioration of the overall image and credibility of healthcare institutions.

Therefore, it is essential to implement targeted and effective communication strategies to address the various barriers that may arise in doctor–patient interactions. Well-executed communication strategies not only help bridge gaps in language and understanding but also foster more empathetic and collaborative relationships between doctors and patients [4], [10], [14]. In the context of medical settings, effective communication strategies have been shown to prevent negative outcomes such as medical errors, patient non-adherence, and dissatisfaction with healthcare services [15], [16].

Numerous studies have examined doctor–patient communication strategies; however, most of these researches have concentrated on communication within general healthcare contexts, without accounting for the specific characteristics of particular services or disease types. This study aims to address that gap by focusing on the context of pain clinics, which present unique communicative challenges. Patients presenting with pain often struggle to articulate their discomfort verbally, due to limited health literacy or various social factors. As a result, doctor–patient interactions in this setting are heavily influenced by nonverbal communication cues such as facial expressions, body movements, vocal intonation, and emotional responses [17]. These nuances make communication strategies in pain clinics not only technically distinct but also demand greater sensitivity and a deeper, more empathetic approach from healthcare professionals.

This study aims to identify and analyze the communication strategies employed by doctor in overcoming both verbal and nonverbal language barriers at the Pain Clinic of RSUD Genteng Banyuwangi. By examining the approaches implemented in real clinical settings, the study seeks to uncover effective and context-specific communication practices that can be further developed and adapted for use in similar healthcare environments.

2. Literature Review

Doctor–patient communication is a critical component of effective healthcare delivery, particularly in specialized settings such as pain clinics, where accurate symptom descriptions are vital for proper diagnosis and treatment. Language barriers can disrupt mutual understanding, compromise diagnostic accuracy, and lower the quality of care. This issue is especially salient in linguistically diverse regions [18] such as Banyuwangi, where patients and healthcare providers may not share the same first language.

Linguistic discordance, where doctors and patients do not share a common first language (L1), introduces significant communication risks. Such discordance often results in miscommunication, leading to stress, clinical errors, and suboptimal care outcomes. This is particularly problematic in pain clinics, as pain is a subjective and culturally embedded experience that requires precise and empathetic communication [18].

One useful framework for addressing these challenges is Communication Accommodation Theory (CAT), which explains how speakers adjust their language and communicative behavior to either converge or diverge socially and cognitively. In clinical settings, convergence can enhance rapport and trust, whereas divergence may signal discomfort or reinforce hierarchical power imbalances [18]. As such, applying CAT can inform more effective communication strategies in pain clinic context.

In addition to verbal interaction, nonverbal communication plays a vital role in cross-cultural medical encounters. Nonverbal cues such as facial expressions, gestures, tone of voice, and body language are frequently misinterpreted across cultures, leading to confusion or unintended offense [19]. In pain clinics, where patients often describe symptoms through metaphors or gestures, such misinterpretations can have direct consequences for clinical decision-making.

Interpreter services are widely recommended as a key strategy to overcome language barriers. However, their use must be carefully managed to prevent misinterpretation and to preserve cultural relevance. Even professional interpreters may introduce bias or omit critical information, highlighting the need for comprehensive training and standardized interpreter protocols [20].

Language barriers have been directly linked to medical errors, delayed diagnoses, and compromised informed consent processes [20]. In the context of pain management, where communication clarity is essential for effective analgesic prescriptions and intervention planning, these risks are especially concerning. Culturally competent care emerges as a pivotal strategy in addressing these communication challenges. Healthcare practices rooted in cultural competence can increase patient trust, satisfaction, and improve health outcomes, particularly in multicultural environments [21] like Banyuwangi. Integrating local cultural expressions of pain into clinical consultations may significantly enhance patient engagement.

Language barriers also carry emotional implications. Patients with limited language proficiency frequently experience anxiety, frustration, or feelings of neglect during consultations [20]. Healthcare providers, in turn, may feel stressed or inadequate when communication breaks down. Addressing this emotional dimension is essential for fostering a compassionate clinical environment.

Furthermore, language barriers often lead to diagnostic errors, particularly in conditions reliant on subjective reporting, such as chronic pain [21]. A study conducted in the Philippines showed that patients frequently misunderstood medical instructions or failed to effectively communicate the severity of their pain due to insufficient translation support [21].

To address these multifaceted challenges, communication strategies in pain clinics must be comprehensive. Key approaches include the use of professional interpreters, the adoption of culturally responsive communication styles, training in CAT-based techniques, and the provision of patient education in multiple languages. Visual aids and multilingual pain scales can further assist in symptom reporting [15].

TAMBAHKAN CONVERSATIONAL ANALYSIS

Cultural norms also shape medical interactions. In some cultures, doctors are perceived as authoritative figures, which discourages patients from asking questions or expressing disagreement [19]. This implicit power dynamic constitutes a hidden barrier to communication. Thus, adopting patient-centered approaches that validate the patient's voice and promote participatory dialogue is essential.

Collectively, the literature underscores the multidimensional nature of language barriers in healthcare and the urgent need for integrated, culturally and linguistically informed communication strategies. In the case of pain clinics in Banyuwangi, adopting such strategies will not only enhance patient satisfaction and clinical safety but also promote equitable healthcare delivery for all members of the community.

3. Proposed Method

This study was conducted at RSUD Genteng Banyuwangi, a public general hospital located in East Java, Indonesia, with a focus on its Pain Clinic, a specialized outpatient unit dedicated to managing chronic pain cases. The objective of this research was to identify and analyze the communication strategies used by doctor and patient during medical consultation, particularly in a context where linguistic, emotional, and cultural dynamics play a critical role in the quality of healthcare delivery.

The primary data for the study consisted of naturally occurring interactions between doctor and patient during real-time consultation. This interaction were documented using non-intrusive video recording methods, which allowed for the accurate capture of both verbal and non-verbal communication cues, such as gestures, facial expressions, tone of voice, and turn-taking behavior.

Following the recordings, all interaction was transcribed verbatim, producing a detailed textual dataset that preserves the sequential structure of conversation. These transcripts formed the foundation for analysis and provided a rich corpus for investigating communicative behavior within a real-world clinical setting.

To analyze the data, the study employed a qualitative research design, specifically utilizing Conversation Analysis (CA) as the primary methodological framework. CA is well-suited for uncovering the micro-level structures and patterns in spoken interaction, including aspects such as turn-taking, pauses, repair mechanisms, intonation, code-switching, and overlapping speech.

Furthermore, the analysis also considered the cultural and linguistic context of Banyuwangi, where patients may speak Javanese, Osing, or Indonesian as their dominant language. This added layer of complexity helped frame the study within a sociolinguistic perspective, recognizing that communication strategies are deeply embedded in local language practices and power relations between patient and doctor.

By examining these interaction through a CA lens, the study was able to identify a variety of communication strategies used by both doctor and patient to overcome language limitations, express pain accurately, and build rapport. These included the use of simplified language, repetition for confirmation, non-verbal gestures, culturally embedded expressions, backchanneling, and collaborative turn completions. The findings of this research provide practical insights into how communication is co-constructed in clinical pain management settings and suggest actionable strategies for improving communication effectiveness, patient satisfaction, and treatment adherence in similar healthcare contexts.

4. Results and Discussion

Effective communication between doctor and patient is crucial for ensuring accurate diagnoses and appropriate treatment, particularly in clinical settings where misunderstandings can have serious consequences. One of the key strategies employed in this interaction is meaning clarification, which is carried out by doctors through repetition, strategic questioning, and speech correction. Repetition serves to reinforce and confirm understanding of essential information conveyed by the patient, while also providing an opportunity for patient to elaborate or revise her statements. Meanwhile, the use of carefully constructed questions, especially open-ended ones, enables doctors to guide the conversation in a more structured and in-depth direction. These questions are designed to avoid sounding interrogative and instead create a comfortable space for patient to express their concerns more fully. When patient used ambiguous or inaccurate terms, doctor can apply gentle corrections. These are not intended as harsh criticisms but rather as clarifications to align the mutual understanding within the correct medical context.

In addition to clarification strategies, doctor also employs language adaptation and empathetic communication techniques to overcome communication barriers and gain a deeper understanding of the patient's condition. Language adaptation involves simplifying medical terminology, adjusting speech style, and choosing language that aligns with the patient's background and level of comprehension, making complex information more accessible. Another vital approach is encouraging patient to share more detailed information, achieved through active and reflective listening. By attentively engaging with the patient's narrative and paraphrasing key points, doctor can elicit further details that may not surface in routine exchanges. Furthermore, interpreting verbal and nonverbal cues, such as facial expressions, tone of voice, and body language, is a critical skill for understanding the patient's condition holistically. When patient struggled to articulate their symptoms verbally, nonverbal

signals provide valuable insight that doctors can respond to with targeted questions or physical examinations. Collectively, these communication strategies foster empathetic interaction, build patient trust, and support more accurate clinical decision-making, ultimately enhancing treatment outcomes.

4.1. Meaning Clarification

In medical communication, clarity of meaning is of paramount importance, as the information exchanged between doctor and patient is directly linked to accurate diagnosis and effective treatment. To ensure that messages are correctly received and understood by both parties as intended, a range of communication strategies is employed. One of the primary approaches in doctor–patient interaction is meaning clarification, which can be achieved through repetition, strategic questioning, and speech correction. These three strategies serve not only to enhance the accuracy of the information conveyed but also to maintain the fluency of the conversation, reduce ambiguity, and strengthen the professional relationship between doctor and patient.

4.1.1 Repetition

In medical communication, repetition is frequently employed as a strategic tool to reaffirm or clarify information conveyed by the patient, particularly when such information holds significant diagnostic relevance. By repeating a patient's statement, either in the form of a question or a key phrase, doctor not only ensure accurate comprehension of the patient's symptoms or concerns, but also create space for further elaboration, should it be necessary. This strategy plays a critical role in minimizing the risk of misinterpretation, which could otherwise lead to inaccurate diagnoses or inappropriate treatments.

Doctor : *Terus setelah itu ada membaik keluhannya?* [And after that, did your symptoms improve?]
Patient : *Nggak, abis itu saya lumpuh. Lumpuh total saya, Dok.* [No, after that I was paralyzed. Completely paralyzed, Doctor.]
Doctor : *Lumpuh total?* [Completely paralyzed?]
Patient : *Iya. Nggak bisa duduk… Di sini sakit rasanya. Nggak tahan saya, Dok.* [Yes. I couldn't sit… It was painful here. I couldn't stand it, Doctor.]

This excerpt clearly illustrates how repetition is used by the doctor as a strategy to clarify the meaning of the patient's utterance. When the patient states, *"Nggak, abis itu saya lumpuh. Lumpuh total saya, Dok,"* [No, after that I was paralyzed. Completely paralyzed, Doctor.] the doctor immediately echoes the critical phrase *"Lumpuh total?"* [Completely paralyzed?] in the form of a question. This constitutes a type of partial repetition that selectively highlights a medically salient part of the patient's statement. The repetition not only functions to verify the doctor's understanding but also invites the patient to confirm or further explain their intended meaning. In this way, repetition used in question form becomes a vital clarification tool within medical interactions.

The primary functions of this strategy include ensuring mutual understanding, soliciting confirmation, and emphasizing diagnostically significant information. In the example above, the phrase *"lumpuh total"* [completely paralyzed] carries serious medical implications and therefore necessitates explicit confirmation. The doctor's repetition prompts the patient to elaborate further, as seen in the following response: *"Iya. Nggak bisa duduk… Di sini sakit rasanya. Nggak tahan saya, Dok."* [Yes. I couldn't sit… It was painful here. I couldn't stand it, Doctor.] This indicates that the doctor's repetition successfully opened space for the patient to provide more specific and clinically relevant details regarding their condition. Thus, repetition emerges as an effective dialogical strategy that facilitates meaningful doctor–patient communication.

In medical communication, clarity and accuracy of meaning are of critical importance. The doctor–patient relationship is not merely transactional; it involves a dynamic exchange that requires mutual understanding. When patient describes symptoms or complaints, these are often expressed in non-technical or ambiguous language. One effective communicative strategy for clarifying such expressions is repetition. A doctor's repetition of a patient's statement can function as a crucial tool to ensure that the information conveyed is correctly and thoroughly understood.

A particularly effective form of repetition in clinical communication is rephrasing the patient's utterance in question form. This approach allows the doctor to receive direct confirmation while also giving the patient a chance to correct or expand on their statement. In this context, repetition serves not only as a means of verification but also as an empathetic gesture, demonstrating that the doctor is actively listening and paying close attention.

Beyond clarification, repetition also plays an essential role in confirming the patient's understanding of medical explanations or instructions. For instance, after providing instructions for medication usage, the doctor may ask the patient to repeat the instructions back as a way of confirming comprehension. This strategy not only underscores critical information but also maintains continuity in the dialogue. As such, repetition constitutes a core component of safe and effective medical communication practices, as it helps to prevent misunderstandings that could have direct consequences for patient health.

4.1.2 Strategic Questioning

Questioning represents a crucial clarification strategy in doctor–patient communication. The questions posed by doctors are not solely aimed at gathering additional information; they also serve to probe more deeply into the patient's condition, clarify symptoms, and guide the conversation toward a more structured and coherent flow. By asking targeted questions, doctors are able to obtain a clearer and more comprehensive understanding of the patient's condition, which in turn supports the diagnostic process.

Doctor : *Terus setelah itu ada membaik keluhannya?* [And after that, did your symptoms improve?]
Patient : *Nggak, abis itu saya lumpuh. Lumpuh total saya, Dok.* [No, after that I was paralyzed. Completely paralyzed, Doctor.]
Doctor : *Lumpuh total?* [Completely paralyzed?]
Patient : *Iya. Nggak bisa duduk… Di sini sakit rasanya. Nggak tahan saya, Dok.* [Yes. I couldn't sit… It was painful here. I couldn't stand it, Doctor.]
Doctir : *Berapa ha... minggu?* [How many da... weeks?]
Patient : *Ada satu mingguan paling.* [About a week at most.]
Doctor : *Terus setelah itu?* [And then after that?]
Patient : *Terapi saya.* [I did therapy]

This excerpt from a doctor–patient conversation demonstrates how the doctor actively employs clarification questions to ensure understanding and encourage the patient to provide more complete information. The process of meaning clarification is evident in several key parts of the interaction. The doctor's questions are not merely intended to confirm information but also to expand and deepen what has already been conveyed by the patient.

When the patient states, "*Abis itu saya lumpuh. Lumpuh total saya, Dok*," [After that I was paralyzed. Completely paralyzed, Doctor] the doctor responds with a brief echo in the form of a question, "*Lumpuh total?*" [Completely paralyzed?]. This type of clarification emphasizes a critical component of the patient's statement. It also gives the patient space to elaborate on what they meant, whether they were truly immobile, which parts of the body were affected, and the extent of functional limitations. The patient's response, "*Iya. Nggak bisa duduk… Di sini sakit rasanya*," [Yes. I couldn't sit... It was painful here] illustrates that the clarification prompt successfully encouraged the patient to provide additional details.

Following this, the doctor asks, "*Berapa ha... minggu?*" which can be interpreted as "*Berapa hari atau minggu*?" [How many days or weeks?] or "*Sudah berapa minggu?*"" [How many weeks has it been?]. This question reflects the doctor's effort to clarify the duration of the patient's paralysis. It constitutes an explicit attempt to obtain more specific and quantifiable information that is critical for clinical assessment. The patient's response, "Ada satu mingguan paling," [About a week at most] provides a temporal marker that helps clarify the clinical situation. The doctor then immediately follows up with, "Terus setelah itu?" [And then after that?], which maintains the continuity of the conversation and encourages the patient to recount the chronological progression of the condition. This strategy not only guides the patient to outline the sequence of events but also highlights the doctor's active role in facilitating a coherent and informative dialogue. Thus, the series of questions in this exchange can be seen as a form of clarificatory speech acts systematically and empathetically used to elicit further information in the context of medical communication.

In doctor–patient communication, it is essential for physicians to ensure that patients provide accurate and comprehensive accounts of their condition. One strategy to encourage more extensive patient responses is the use of open-ended questions. Questions such "What did you feel after your last treatment?" or "Could you explain more about the symptoms you've been experiencing?" give patients the space to explore and articulate their experiences in greater detail. Open-ended questions allow patients to elaborate on their feelings or symptoms beyond simple "yes" or "no" responses, which can often limit the information available to the doctor.

4.1.3 Utterances Correction

Correction of a patient's utterance by the doctor plays an important role in ensuring that the information provided is accurately understood, especially when the patient uses ambiguous or medically inaccurate terms. Such corrections are not merely acts of rectification, but rather function as conversational tools that help guide the interaction in a medically appropriate and contextually relevant direction.

Patient : *Anu, dokter… Saya punya lambung…*[Um, doctor… I have a stomach…]
Doctor : *Oh, sakit lambung.. Nggeh*...[Oh, stomach pain.. Yes...]
Patient : *Nggeh… Kemarin itu kan minum, sempat minum obat linu-linu itu.. Nah kambuh…* [Yes… Yesterday I took, I happened to take medicine for body aches... and then it relapsed...]
Doctor : *Nah, ibu… Untuk pasien yang punya maag… sakit apa… asam lambung, itu harus mengurangi obat penghilang rasa sakit* [So, ma'am… for patients with gastritis… or acid reflux issues, they should reduce their intake of painkillers.]

This excerpt illustrates how the doctor uses corrective strategies as a form of clarification in response to the patient's initial statement. When the patient says, "*Saya punya lambung*," [I have a stomach,] the utterance is vague and incomplete, lacking a clear medical complaint. Literally speaking, everyone "has a stomach," and the phrase fails to convey a specific health problem. This suggests the patient may be struggling to articulate their symptoms in medically meaningful terms. To avoid misinterpretation and to ensure accurate understanding, the doctor immediately reformulates the statement as "*Oh, sakit lambung*," [Oh, stomach pain] helping the patient to express the underlying issue more clearly.

The doctor's correction here functions not simply as a literal amendment, but rather as a semantic clarification that invites the patient to affirm and elaborate on their complaint. The patient's response, "*Nggeh…*" [Yes…], indicates acceptance of the doctor's interpretation, suggesting that the clarification aligns with what the patient intended to convey. Through this strategy, the doctor effectively redirects the patient's vague statement toward a more medically relevant expression of their condition. The patient then proceeds to share additional information, which the relapse occurred after taking over-the-counter pain medication which provides an important clue for the doctor in assessing potential triggers.

In the doctor's subsequent utterance, the terms "*maag*" [gastritis] and "*asam lambung*" and [acid reflux] are introduced as more accurate medical descriptors, serving as implicit corrections of the patient's earlier phrasing. By substituting "*punya lambung*" [have a stomach] with these specific diagnoses, the doctor reframes the statement using medically recognized terminology. This correction is not intended as a reprimand, but rather as an effort to clarify and specify the patient's intended meaning. Through the mention of "*maag*" and "*asam lambung*," the doctor helps the patient reconstruct their narrative in a more accurate and clinically meaningful way. This linguistic shift also serves as a launching point for the patient to elaborate on symptoms, particularly in connection to medication use.

In this context, the doctor assumes the role of a communication facilitator, one who not only interprets implicit meanings in patient speech but also guides patients toward clearer and more informative expressions of their health concerns.

More broadly, in doctor–patient communication, utterance correction can function as an essential clarification strategy that supports the accuracy of the medical information being exchanged. When a patient's explanation is imprecise, ambiguous, or deviates from standard medical terminology, the doctor may employ gentle correction to ensure accurate comprehension. For example, if a patient says they are "allergic to cold," but in fact mean they are "sensitive to cold air," the doctor might respond with a clarifying question such as, "Do you mean that every time you're exposed to cold air, you develop a rash or experience shortness of breath?" Such corrections are not judgmental but serve to align understanding

and assist patients in articulating their experiences more accurately. Thus, utterance correction plays a vital role in fostering effective communication, reducing the risk of misdiagnosis, and strengthening the doctor–patient relationship through mutual understanding.

4.3.2 Language Adaptation

In medical communication, linguistic adaptation is a crucial strategy employed by doctors to ensure that messages are clearly understood by patients without compromising the accuracy of medical information. This involves adjusting speech patterns, word choices, and communication styles to align with the patient's background, level of knowledge, and communicative needs. Doctors often simplify medical terminology, provide more accessible explanations, and adapt their tone and level of formality to suit the patient, particularly when dealing with those who have limited health literacy. This approach not only enhances patient comprehension but also strengthens the therapeutic relationship and creates a more empathetic communication environment. Ultimately, it contributes to better treatment outcomes and improved patient satisfaction.

Doctor : *Kurangi gula ya bu supaya mengurangi inflamasi.* [Reduce sugar intake, ma'am, to lessen the inflammation.]
Patient : *Manis-manis ya, dok?* [You mean sweet things, doctor?]
Doctor : *Ya… Kurangi makan karbohidrat ya bu… Karbohidrat itu, tepung, nasi, gula yang manis-manis itu, bikin peradangannya tambah hebat.* [Yes... Reduce carbohydrates, ma'am... Carbohydrates include flour, rice, and sweet sugars, those can worsen the inflammation.]
Patient : Hmm.

In this interaction, the doctor initially uses the term "*inflamasi*" [inflammation], a technical medical term rooted in Latin, commonly used in clinical or scientific contexts. While medically accurate, such terminology can be inaccessible or confusing to patients without a medical background. The patient's follow-up question "*Manis-manis ya, dok?*" [You mean sweet things, doctor?] reflects a need for clarification and signals that the initial term may not have been fully understood. In response, the doctor adjusts their language, switching from "*inflamasi*" to "*peradangan*" a more familiar and everyday Indonesian term for the same condition. This switch represents a clear instance of linguistic adaptation, where the doctor lowers the technical complexity of their language without losing the core meaning of the medical message.

This shift also reflects the pragmatic nature of effective medical communication. The doctor adapts their language in real-time based on the patient's cues, offering a contextualized explanation of how sugar and carbohydrate consumption contribute to inflammation. This helps prevent miscommunication while ensuring the information remains medically relevant. Such responsiveness demonstrates the doctor's attentiveness not only to what is being said but also to how the patient is receiving and interpreting the information.

Patient : *Itu asam urat apa apa ya, dok?* [Is that gout or something, doctor?]
Doctor : *Bukan, ini peradangan ligamen namanya, bu.* [No, this is called ligament inflammation, ma'am.]
Patient : Oo...
Doctor : *Peradangan padat serat yang menghubungkan tulang dengan tulang. Nanti saya kasi info. Tebal sekali ya. Biasanya memang keluhannya ini akan muncul saat bangun tidur yang paling berat.* [Inflammation of dense fibers that connect bones to bones. I'll give you more information later. It's very thick. The complaints usually appear most severely after waking up.]
Patient : *Bangun tidur yang parah itu, dok. Dipijet itu ndak patek sakit. Ndak patek sakit tapi kok buat jalan sakit banget.* [It's the worst after waking up, doctor. Massaging it doesn't really hurt, not much pain there, but walking really hurts a lot.]

Here, the doctor first uses the medical term "*ligamen*" [ligament], which, while accurate, is quite technical. Upon observing the patient's hesitant "Oo...", a sign of limited understanding, the doctor immediately adapts by rephrasing "*ligamen*" into a functional explanation: "*padat serat yang menghubungkan tulang dengan tulang*" [dense fibers that connect bones to bones]. This linguistic shift from terminology to description reflects a strategic

communicative move that prioritizes comprehension over precision, without sacrificing the scientific integrity of the explanation.

This strategy also exemplifies an empathetic and patient-centered approach, in which the doctor recognizes the importance of aligning communication with the patient's level of understanding. Follow-up descriptions such as "*tebal sekali ya*" [very thick] and contextual references to symptom onset "*saat bangun tidur*" [after waking up] help situate the medical condition in the patient's lived experience, making it easier for the patient to relate to and engage with the information.

The patient's continued response, offering additional experiential details about their condition, indicates that the doctor's linguistic adaptation has successfully facilitated understanding and built trust. The patient feels comfortable elaborating on their symptoms, which deepens the doctor's insight and improves diagnostic accuracy. This illustrates that linguistic adaptation is not solely about simplifying medical language but also about fostering interpersonal rapport and mutual trust in clinical interactions.

Medical communication is inherently complex and dynamic. Effective doctor–patient interaction is essential for accurate diagnosis, treatment adherence, and overall patient satisfaction. However, doctors often face challenges when conveying medically complex concepts to patients with diverse cultural backgrounds, varying levels of health literacy, and different emotional responses. Thus, the ability to adapt language is a critical skill in clinical practice.

Linguistic adaptation refers to the intentional adjustment of language use, tone, delivery pace, and communication style to match the patient's cognitive and emotional needs. This may involve simplifying terminology, using analogies or visual aids, and observing nonverbal cues that signal confusion or emotional distress. Cultural sensitivity is also key, what is considered clear communication in one cultural context may be seen as insensitive or obscure in another. Moreover, some patients may hesitate to ask for clarification due to fear, embarrassment, or deference to medical authority. Therefore, doctors must be proactive and responsive, tailoring their communication styles to foster inclusive and supportive dialogue.

Ultimately, linguistic adaptation is not merely an interpersonal skill but a manifestation of a patient-centered care approach. When doctors can tailor their communication to meet patients' needs, they build trust, enhance therapeutic relationships, and promote active patient engagement in care decisions. This leads to improved clinical outcomes, reduced misunderstandings, and higher satisfaction for both parties. The next section will explore core principles of linguistic adaptation, common challenges faced in practice, and practical strategies healthcare professionals can apply to communicate more effectively with patients from diverse backgrounds.

4.3.4 Interpreting Verbal and Non-Verbal Expressions

In doctor–patient communication, the ability to interpret both verbal and non-verbal expressions is a critical skill that enhances mutual understanding and the overall effectiveness of the interaction. Verbal expressions refer to the words and phrases patients use to articulate their complaints, symptoms, or concerns. In contrast, non-verbal expressions include body language, facial expressions, eye contact, gestures, posture, and vocal tone, elements that often reveal emotional states, levels of discomfort, or unspoken anxieties.

A doctor's capacity to accurately read and interpret these cues allows them to perceive messages that may not be explicitly stated. For instance, a patient's hesitancy, facial grimace, or sudden change in tone might signal pain or emotional distress that is not directly verbalized. Recognizing these subtle indicators enables doctors to respond more empathetically and to adjust their clinical communication strategies accordingly.

By integrating both verbal and non-verbal signals in their assessment, doctors can form a more holistic understanding of the patient's condition. This comprehensive approach to communication not only improves diagnostic accuracy but also fosters an environment of trust and openness. Patients are more likely to feel heard and understood, which in turn encourages greater participation in the decision-making process and adherence to treatment plans.

Ultimately, effective interpretation of verbal and non-verbal expressions contributes to a more patient-centered model of care, where communication becomes a two-way, dynamic process grounded in empathy, attentiveness, and mutual respect.

Doctor : *Niki sakit gak?* [Does this hurt?]
Patient : *Aaaa nggeh… sakit niku…* [Aaaa… Yes… that hurts.]
Doctor : *Ini ya, bu?* [Here, ma'am?]
Patient : *Kurang ke atas. Naa ya itu dah..* [A bit higher. Yes that's it]

In this interaction, we can observe how the doctor utilizes the patient's non-verbal expressions as a communicative strategy to overcome the patient's difficulty in verbally articulating their pain. When the doctor asks, "*Niki sakit gak?*" [Does this hurt?], the patient responds, "*Aaaa nggeh.. sakit niku..*" [Aaaa… Yes… that hurts.], using a tone that conveys discomfort despite the brevity and vagueness of the verbal response. The patient's non-verbal cues at this moment, such as facial expressions, gestures, or vocal intonation, likely provide the doctor with additional insight into the level of discomfort being experienced. Based on this interpretation, the doctor proceeds with a more focused follow-up question, "*Ini ya, bu?*" [Here, ma'am?], referring specifically to the body area under examination.

The patient then responds by saying, "*Kurang ke atas*" [A bit higher], indicating that the pain is localized in a slightly higher or different area than the one previously referred to by the doctor. This response demonstrates that although the patient may be unable to articulate their symptoms in detail, bodily expressions or hand gestures can offer clearer guidance to the physician. Such cues enable the doctor to more accurately pinpoint the patient's complaint and probe further for information.

By utilizing non-verbal cues, such as the patient's body orientation or the direction of their hand movements, the doctor can adjust the diagnostic focus and physical examination strategy with greater precision. The use of non-verbal expression in this context strengthens both empathetic and accurate communication, wherein the physician does not rely solely on the patient's words, but also on embodied signals that help clarify the location and intensity of the experienced pain.

Doctor : *Niki sakit mboten?* [Does this hurt?]
Patient : *Mboten.* [No.]
Doctor : *Niki?* [This one?]
Patient : *Aduh aduh… Nggeh nggeh.* [Ouch ouch… Yes yes.]

This interaction between doctor and patient demonstrates the implementation of communication strategies that effectively integrate both verbal and non-verbal elements. The conversation begins with the doctor's polite inquiry, "*Niki sakit mboten*?" [Does this hurt?], reflecting a gentle, exploratory approach characteristic of local cultural politeness. Such an approach provides space for the patient to respond honestly, without feeling pressured.

Interestingly, the patient's initial response, "*Mboten*" [No], can be interpreted as either a denial or hesitation in disclosing their actual condition. This may stem from reluctance, embarrassment, or emotional unpreparedness to acknowledge the presence of pain. Rather than confronting the denial directly, the doctor simply repeats, "*Niki*?" [This one?], likely accompanied by a non-verbal gesture such as pressing on a specific area of the body. This indicates a subtle non-verbal communicative strategy, aimed at eliciting a more genuine response from the patient.

The patient's subsequent utterance, "*Aduh aduh… Nggeh nggeh*" [Ouch ouch… Yes yes], marks a significant shift in their communicative stance. The phrase "aduh aduh" is a verbalized expression of pain, while "*nggeh nggeh"* [yes, yes] serves as an affirmation, acknowledging the presence of physical discomfort. This shift suggests that although the patient initially denied the pain, the doctor's sensitivity to non-verbal signals and use of a non-confrontational approach successfully facilitated a more accurate expression of the patient's experience.

From this interaction, it can be concluded that the doctor's communicative strategy plays a crucial role in fostering trust and encouraging patient openness. The doctor demonstrates high sensitivity to the patient's non-verbal cues and uses repetition and gesture as indirect tools to confirm information. This underscores the idea that communication in medical practice is not solely reliant on spoken language, but also on the physician's ability to interpret subtle expressions and behaviors.

Thus, this brief exchange illustrates the critical importance of empathic communication in medical encounters. Understanding non-verbal expressions and responding appropriately enables doctors to obtain more accurate clinical information, ultimately contributing to more effective diagnosis and treatment planning.

In the broader context of doctor–patient communication, the patient's non-verbal expressions serve as essential tools for overcoming communication barriers, especially when patients struggle to articulate their pain verbally. Not all patients possess the capacity or confidence to clearly describe their symptoms, due to factors such as limited medical knowledge, educational background, age, or emotional state during the consultation. In such cases, doctors observe facial expressions, body movements, vocal intonation, and subtle gestures, such as touching a particular body part or holding their breath while speaking. These non-verbal cues assist doctors in identifying the location, intensity, and nature of the pain, even if it is not explicitly stated.

As a communication strategy, doctors may respond to these non-verbal cues by asking more focused closed-ended questions, offering clarifying statements, or performing targeted physical examinations based on their expressive observations. For instance, if a patient grimaces while sitting or clutches their abdomen during conversation, the doctor might ask, "Does this area hurt when you sit for a long time?'. This strategy helps bridge the gap between the patient's subjective experience and the doctor's objective need to understand the complaint precisely.

Therefore, the ability to read and respond to non-verbal patient expressions enables doctors to establish more empathic and effective communication, while also strengthening diagnostic accuracy and therapeutic planning based on a deeper understanding of the patient's condition.

5. Comparison

Most existing studies on doctor–patient communication focus on general clinical settings and emphasize interpreter use, patient education, or standardized training. While valuable, these approaches often overlook the real-time, micro-level interaction strategies used by doctors during consultations, especially in linguistically diverse and resource-limited contexts.

This study contributes a more context-specific and interaction-based perspective by applying Conversation Analysis (CA) to naturally occurring clinical dialogue in a pain clinic, an underexplored setting in communication research. Unlike prior work relying on self-reported data, this research documents how doctors use strategies such as repetition, strategic questioning, utterance correction, and non-verbal cue interpretation to adapt dynamically to patient responses and overcome language barriers.

The role of the doctor as an active linguistic mediator, not just a provider of information. These findings demonstrate a measurable contribution to the field by highlighting how culturally sensitive, moment-to-moment adaptation enhances communication where formal interpretation is not feasible.

Thus, this study extends current understanding by offering empirical evidence of in-situ communication strategies tailored to multilingual, culturally rich pain clinic environments, insights that can inform future communication training and policy in similar healthcare contexts.

6. Conclusions

This study examined the communication strategies employed by doctors in addressing verbal and non-verbal language barriers during clinical interactions at the Pain Clinic of RSUD Genteng Banyuwangi. Through qualitative analysis grounded in Conversation Analysis (CA), the research identified a range of communication techniques used by physicians to facilitate mutual understanding, particularly in contexts where patients struggle to articulate pain due to limited health literacy, emotional factors, or cultural constraints.

The main findings reveal that effective doctor–patient communication in this setting involves a combination of strategies: repetition for clarification, strategic questioning, utterance correction, linguistic adaptation, and interpretation of non-verbal cues. These strategies not only help clarify meaning but also support empathetic interaction, enhance rapport, and improve diagnostic accuracy. By aligning language use with patients' communicative capacities and cultural backgrounds, doctors foster patient-centered care and ensure a more inclusive clinical environment. The findings strongly support the initial

hypothesis that adaptive communication plays a critical role in overcoming language-related barriers in medical consultations.

The implications of this research are significant for improving communication practices in multicultural healthcare settings. The study contributes to the growing body of knowledge on medical pragmatics and sociolinguistic dimensions of clinical discourse, offering actionable insights for medical training programs and health policy development.

However, the study is limited by its focus on a single clinic and language community, which may not fully represent broader healthcare contexts. Future research should expand to include comparative studies across different regions, medical departments, and patient demographics, to further explore how cultural and linguistic diversity shapes clinical communication.

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