# Person deixis as a communicative tool in medical consultations

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### Abstract

This study investigates the role of person deixis in enhancing doctor-patient communication. Person deixis, which involves linguistic expressions linking utterances to personal referents, is crucial in shaping the dynamics of medical consultations. Drawing on Functional Pragmatics, this research emphasizes the importance of context and communicative functions in language use. A mixedmethod approach was employed, combining quantitative and qualitative analyses of a Hungarian corpus comprising 50 recorded consultations between six general practitioners and their patients. Quantitative analysis revealed that thirdperson singular verbs, used formally to address patients, are the most frequent type of person deixis, accounting for 37.4% of occurrences. First-person singular verbs (13.9%) and first-person plural verbs (7.4%) also play important roles in conveying personal perspectives and fostering collaboration. Personal pronouns and nouns with possessive suffixes further personalize interactions, emphasizing the patient's active role. Qualitative analysis highlighted how deictic expressions construct identities, and moderate relational dynamics. The use of third-person singular verbs reflects a formal and respectful tone, maintaining professional distance. In contrast, first-person singular and plural verbs enhance patient engagement and collaborative decision-making, fostering a sense of partnership and empathy. The findings demonstrate a communication style that balances formality and respect with active participation and collaboration. Understanding these patterns can inform best practices for enhancing healthcare communication, ultimately improving patient outcomes and satisfaction.

**Keywords:** Doctor-patient consultations, functional pragmatics, person deixis, patient-centred communication, communication strategies.

### Resumen

#### La deixis personal como herramienta comunicativa en las consultas médicas

Este estudio investiga el papel de la deixis personal en la mejora de la comunicación entre médicos y pacientes. La deixis personal, que implica expresiones lingüísticas que vinculan los enunciados con referentes personales, es crucial para moldear la dinámica de las consultas médicas. Con base en la Pragmática Funcional, esta investigación enfatiza la importancia del contexto y las funciones comunicativas en el uso del lenguaje. Se empleó un enfoque mixto que combina análisis cuantitativos y cualitativos de un corpus húngaro compuesto por 50 consultas grabadas entre seis médicos generales y sus pacientes. El análisis cuantitativo reveló que los verbos en tercera persona del singular, utilizados formalmente para dirigirse a los pacientes, son el tipo de deixis personal más frecuente, con el 37,4% de las ocurrencias. Los verbos en primera persona del singular (13,9%) y en primera persona del plural (7,4%) también desempeñan un papel importante para transmitir perspectivas personales y fomentar la colaboración. Los pronombres personales y los sustantivos con sufijos posesivos personalizan aún más las interacciones, destacando el papel activo del paciente. El análisis cualitativo destacó cómo las expresiones deícticas construyen identidades y moderan las dinámicas relacionales. El uso de verbos en tercera persona del singular refleja un tono formal y respetuoso, manteniendo una distancia profesional. En contraste, los verbos en primera persona del singular y plural mejoran el compromiso del paciente y la toma de decisiones colaborativa, promoviendo un sentido de asociación y empatía. Los hallazgos demuestran un estilo de comunicación que equilibra la formalidad y el respeto con la participación activa y la colaboración. Comprender estos patrones puede guiar el desarrollo de mejores prácticas para optimizar la comunicación en el ámbito sanitario, lo que a su vez contribuye a mejorar tanto los resultados como la satisfacción de los pacientes.

Palabras clave: Consultas médico-paciente, pragmática funcional, deixis personal, comunicación centrada en el paciente, estrategias comunicativas.

### 1. Introduction

Effective communication in healthcare is essential for improving patient outcomes, understanding, adherence to therapy, and overall satisfaction (Bálint, 1957; Csabai et al., 2009; Ghosh et al., 2020). Studies have demonstrated, conversely, that poor patient-physician communication can lead to decreased compliance with treatment and lower satisfaction scores (Levinson, 1983; Street et al., 2009). As studies of doctor-patient interactions

over the past decades have highlighted the evolving nature of healthcare communication (Bigi, 2016), many medical schools and residency programs have integrated communication skills into their curricula (Bragard et al., 2006; Ghosh et al., 2020).

Understanding how linguistic choices affect doctor-patient interactions is crucial for enhancing communication. One frequently used element in these interactions is person deixis. These deictic expressions, such as personal pronouns (*I, you, he, she*), verb endings (which indicate the person and number of the subject, such as in Spanish *hablo* 'I speak' versus *habla* 'he/she speaks'), and possessive structures (*my doctor*) convey referential information, shape communication dynamics, reflect and construct social relationships and professional hierarchies (Naughton, 2018).

This study has a primary and a broader aim. Its primary goal is to investigate the specific use of person deixis in Hungarian medical consultations to understand how these linguistic choices affect doctor-patient interactions. It employs a mixed-method approach combining quantitative and qualitative analyses of recorded consultations to reveal the complex interplay between language, culture, and professional practice in healthcare. By understanding the nuances of person deixis in Hungarian consultations, the findings can provide insights applicable in diverse cultural and linguistic contexts. This study aspires to contribute to the broader objective of enhancing healthcare communication by offering insights into the practical applications of person deixis in real-world settings. Findings from such studies can be integrated into global medical training programs and continuously updated to meet the evolving challenges of modern medical practice, ultimately benefiting healthcare systems worldwide.

# 2. Theoretical framework

#### 2.1. A functional pragmatic approach to the analysis of person deixis

Pragmatics examines how context influences the interpretation of meaning, focusing on how speakers use and understand language in different situations, accounting for the social, cultural, and situational contexts that shape communication. Pragmatics thus encompasses the examination of how contextual factors contribute to meaning beyond the literal content of words and sentences (Levinson, 1983). According to Mey (2001), the foundational concepts of pragmatics highlight how signals are interpreted in

relation to various dimensions, including psychological, biological, and sociological components. Deictic expressions are inherently context-dependent; without knowing the context, their referents remain ambiguous (Fillmore, 1997). For example, the pronoun *I* denotes the speaker, *you* refers to the addressee, and *here* indicates the speaker's location at the time of speaking.

Building on this understanding, Functional Pragmatics emphasizes the context and communicative functions of language, focusing on how language serves specific purposes in various situations. Therefore, language is viewed not merely as a system of rules and structures but as a tool for achieving various communicative goals in context-specific situations (Tátrai, 2011). This framework is especially pertinent for the analysis of person deixis in medical consultations, where the language used by healthcare professionals and patients fulfils specific communicative purposes, such as establishing professional identity, managing interactional dynamics, expressing empathy, and fostering patient engagement (Blommaert, 2008). Person deixis refers to linguistic expressions that rely on contextual information for interpretation, linking utterances to personal referents (Levinson, 1983; Yule, 1996), and the Functional Pragmatics approach highlights the interaction between linguistic expressions and the contexts in which they are used.

In medical consultations, person deixis is crucial for shaping the interaction between doctors and patients, influencing communication dynamics and the establishment of professional roles. Personal pronouns such as *I, you, we* grammaticalize the category of person. These pronouns indicate who is speaking, who is being addressed, and who or what is being discussed (Levinson, 1983). These linguistic features convey referential information and reflect social relationships, professional hierarchies, and degrees of formality and politeness. For instance, a doctor might use the pronoun *we* to foster a sense of partnership with a patient, suggesting a collaborative approach to healthcare, as in the utterance *We will look into your test results and decide the next steps together*. Conversely, professional distance and authority can be established by using formal titles (Kuna & Domonkosi, 2022) such as *Dr. Smith, Professor Brown*, or *Mr. Lee*.

Analysing person deixis in Hungarian medical consultations offers insights into medical communication. This research can inform best practices to enhance healthcare communication, leading to improved patient outcomes, satisfaction, and doctor-patient relationships. By focusing on person deixis, this study bridges local linguistic practices with global research, fostering a transdisciplinary perspective that enhances the relevance and impact of linguistic research in medical settings.

#### 2.2. Previous research on person deixis in medical discourse

The role of person deixis in medical communication is crucial for enhancing clarity, precision, and role establishment within interactions (Hashim & Safwat, 2013). Recent studies have further emphasized the impact of patient-centred communication on health outcomes, demonstrating how linguistic strategies can foster better understanding and engagement between doctors and patients (Riedl & Schüßler, 2017; Ghosh et al., 2020).

Several factors shape the use of person deixis, such as the genre and medium of medical communication. Nursing texts predominantly use person deixis to clarify roles and provide support in instructional contexts (Hashim & Safwat, 2013). In contrast, the use of person deixis in online medical consultations in China blends authority with warmth using medical jargon and polite vocatives to build trust (Mao & Zhao, 2019). Neimah (2024) notes the frequent use of second-person pronouns in medical leaflets to engage patients directly, emphasizing their active role in following medical instructions. This engagement is crucial for patient compliance and overall healthcare outcomes.

Societal and cultural contexts also shape the use of person deixis in medical discourse. English doctors, for example, use second-person pronouns more frequently than their Spanish counterparts to emphasize patient individuality and engagement (Giménez-Moreno & Ricart-Vayá, 2022), illustrating cultural differences in medical communication practices. In Southwestern Nigeria, doctors switch between locutions understandable to non-professionals and technical jargon, balancing clarity with cultural sensitivity (Odebunmi, 2006). This pragmatic adaptation helps manage patient emotions and comprehension effectively, reflecting the unique interplay of English and indigenous languages. By using person deixis strategically, Nigerian doctors balance the need for clarity with the cultural imperative to protect patients from potentially distressing information, ensuring effective communication tailored to the local context.

#### 2.3. Person deixis in Hungarian medical discourse

The doctor-patient relationship in Hungary is influenced by deep-rooted socio-cultural values and linguistic practices. Historically, Hungarian medical interactions were characterized by a paternalistic model. Over time, there has been a shift towards a more patient-centred approach in Hungarian healthcare. As the patient-centred model gains prominence, there is a noticeable increase in the use of more engaging and inclusive language forms that foster better rapport and mutual understanding.

In Hungarian, person deixis is marked by a rich system of verb endings, possessive suffixes and personal pronouns, reflecting social relationships and professional hierarchies. Verb conjugations change according to the subject. For instance, *beszélek* means 'I speak', *beszélsz* means 'you speak' [informal], and *beszél* can mean 'he/she speaks' and also 'you speak' [formal]. In formal situations, Hungarian often uses a zero pronoun and third-person singular verb forms to convey respect. For example, instead of directly using ön 'you' [formal] one might simply use the third-person singular verb form *beszél* 'you speak' [formal] without the pronoun, as the verb ending makes it evident who is being referred to. Hungarian also employs possessive suffixes to denote ownership and relationship. Examples include *orvosom* 'my doctor', *orvosod* 'your doctor' [informal], and *orvosa* 'his/her doctor' or 'your doctor' [formal]. The use of these suffixes makes it unnecessary to include possessive pronouns because the suffix itself indicates the possessor.

Hungarian uses different forms of address to signal varying levels of formality and respect. The personal pronouns *ön* 'you' [formal] or *maga* 'you' [formal] and *te* 'you' [informal] are used depending on the social context and the relationship between the speakers. As an addressing pronoun, *ön* 'you' [formal] is intended to convey the speaker's adaptation to the official speech situation. This pronoun becomes the most widespread addressing strategy in status-marked communicative domains. In such contexts, it is regarded as a general form expressing a high degree of respect, formality, and politeness (Domonkosi, 2018).

Patterns with *maga* 'you' [formal] exhibit significant variation in perceptions and can shape various social relationships. However, it is mostly associated with a negative, offensive connotation. The ongoing decline in the use of this pronoun can be partly attributed to its historical use: it was previously acceptable in intimate relationships between equals and in asymmetrical relationships where it was used by the person with higher status. The pronoun *te* 'you' [informal] is most of the time considered too intimate for a medical setting.

A case study (Kuna, 2016) on the self-representation of four Hungarian general practitioners highlights that first-person singular is used in varied ways, such as polite-interpersonal, empathetic, feedback-oriented, and examination-related contexts. Similarly, first-person plural elements show diverse patterns, including doctor-patient relationships. They often contribute to a partnership-oriented dynamics, especially in empathetic contexts. However, this empathetic use is initiated by the doctor, maintaining an underlying asymmetry in the relationship.

While Kuna's (2016) study is the first and so far the only research focusing on person deixis in Hungarian medical communication, the study's small sample size of four GPs and their interactions with patients may not represent the broader population of GPs and patients in Hungary. The research predominantly focuses on the doctors' use of first-person deictic elements, with minimal consideration of the patients' contributions to the interactions. Further research is essential to generalize the findings concerning both doctors' and patients' communicative patterns.

All these studies collectively highlight the pivotal role of person deixis in effective communication and patient care, demonstrating its adaptability across various medical settings and cultural contexts. Understanding these nuanced uses of deixis allows medical professionals to refine their communicative strategies, enhancing patient outcomes and the overall efficacy of medical discourse. The interplay between linguistic form and context underscores the importance of a pragmatic approach to discourse analysis, considering the multifaceted influences on language use in realworld settings.

# 3. Mixed-method analysis of Hungarian medical consultations

# 3.1. Recorded consultations between general practitioners and patients

The corpus for this study comprises recorded consultations between six Hungarian general practitioners (GPs) and 50 Hungarian patients (P), conducted across six Hungarian cities during 2023 and 2024. Ethical guidelines were rigorously followed during data collection, including obtaining ethical approval and written consent from both patients and GPs. The dataset includes a total of 50 consultations, encompassing 39,898 tokens, 29,817 words, and 1,783 sentences. Four GPs conducted eight consultations each, and two GPs conducted nine consultations each, resulting in a total of 50 unique recordings. All patients participated individually in these sessions. The audio recordings were transcribed verbatim using Alrite software. Each transcription was meticulously reviewed and corrected to ensure precision.

Several exclusion criteria were defined, such as incomplete recordings, poor audio quality, and non-representative interactions. However, none of these issues occurred, and all recorded data were included in the analysis, ensuring the dataset's comprehensiveness and facilitating a detailed examination of language functions within these interactions.

An overview of patient characteristics, such as age groups and socioeconomic backgrounds, is not provided in this paper. As this is a preliminary study without comprehensive previous research on person deixis in Hungarian medical communication, our primary focus was on conducting an exploratory analysis of linguistic patterns. Future research could benefit from including socio-economic data, as it would offer deeper insights into the potential influence of these factors on communication patterns.

#### 3.2. Relevance of a mixed-method approach

A mixed-method approach provides a comprehensive analysis of person deixis, combining quantitative frequency analysis with qualitative discourse analysis (Heritage & Maynard, 2006). By integrating both quantitative and qualitative data, this study aims to offer a holistic understanding of how person deixis functions in medical consultations (Thomson & Dowrick, 2021). The quantitative analysis provides a broad overview of the frequency and distribution of deictic expressions, while the qualitative analysis delves into the contextual usage and implications of these expressions. The data was analysed using Sketch Engine's wordlist function to generate frequency lists and the concordance function to identify the context of person deixis. This approach is crucial because the context can significantly alter the meaning of deictic expressions. For example, the Hungarian word *mi* can mean both 'we' and 'what', depending on the context. Visualizations from Sketch Engine were also utilized to illustrate patterns and distributions effectively.

The qualitative analysis involved detailed discourse analysis to understand how deictic expressions function within consultations. Transcripts were coded to categorize types of deixis and annotate segments where deixis played a key role in managing dialogue, constructing identities, and moderating relational dynamics. This process ensured transparency and replicability. The identification of deictic expressions focused on the system of Hungarian person deixis, such as verbs with suffixes, pronouns, and nouns with suffixes. Verbs were categorized according to number and person, such as third-person singular (used formally to reflect politeness and respect), first-person singular (indicating personal actions and experiences), first-person plural (indicating collaborative actions), and third-person plural (involving actions from other professionals or family). Pronouns included those used to maintain (in)formality and respect with regards to the patient's and the doctor's active roles. Nouns with possessive suffixes were categorized as third-person singular (you [formal]), calls and addresses, and first-person singular (indicating direct involvement). The functional categorization of deixis focused on how it managed the flow of conversation, established roles and identities, and affected interpersonal relationships. Deictic expressions were analysed for their role in clarifying instructions, maintaining structure, constructing the doctor's professional identity, empowering the patient's role, fostering a sense of partnership, expressing empathy and support, maintaining respect and politeness, and ensuring professional distance.

This study, grounded in Functional Pragmatics, provides a detailed analysis of person deixis in Hungarian medical consultations between general practitioners (GPs) and patients (P), highlighting the frequencies and patterns of different verb conjugations and their implications for doctor-patient communication. By examining the use of first, second, and third-person forms, this analysis offers insights into the sociocultural dynamics and communication strategies in medical settings, supporting previous research by Levinson (1983) and Kuna (2016). However, while Levinson's (1983) work laid a strong foundation, our qualitative analysis aims to build upon it by exploring how social factors such as politeness, hierarchy, and formality influence person deixis. We also incorporate data-driven approaches from corpus linguistics to provide real-world evidence. In addressing Kuna's (2016) limitations, our study includes a broader sample and considers not only the doctors' use of deictic elements but also the patients' contributions. We hope this balanced approach provides a

comprehensive view of interaction dynamics, highlighting the communicative strategies of both parties in parallel.

### 4. Results and discussion

#### 4.1. Frequency of person deixis

This diagram illustrates the frequency and overall percentage of various types of person deixis used in Hungarian medical consultations, including conjugated verbs, personal pronouns, and nouns as calls and nouns with suffixes. Altogether, 3238 person deixes were identified in the corpora, as demonstrated in Figure 1.



Figure 1. Occurrences of person deixes in Hungarian medical consultations.

Results show that third-person singular verbs are the most frequently used type of person deixis in the examined corpus of Hungarian medical consultations, accounting for 37.4% of all occurrences. This high frequency reflects the formal and respectful tone typical of these interactions, as the third-person singular is often used to address the second person singular formally in Hungarian. First-person singular verbs, the second most common type, make up 13.9% of the occurrences, indicating the importance of personal perspective in these consultations. This is followed by first-

person plural verbs at 7.4%, which emphasize collaborative and inclusive communication between doctors and patients. Third-person plural verbs, representing 4.0%, often refer to actions or information from other healthcare professionals or family members, integrating external perspectives into the consultation.

Personal pronouns show that *én* 'I' is used most frequently, making up 4.6% of the total deixis, underscoring the patient's active role in the dialogue.  $\ddot{O}n$  'you' [formal] and *maga* 'you' [formal] are used less frequently, at 2.3% and 1.1%, respectively, but are essential for maintaining formality in addressing patients. Nouns with possessive suffixes further personalize the interactions, with the third-person singular form accounting for 3.2% of occurrences. Calls and addresses make up 2.2%, and first-person singular nouns account for 1.1%, reflecting direct involvement in the conversation.

Overall, these results highlight a communication style that balances formality and respect with active participation and collaboration. The predominant use of third-person singular forms sets a respectful tone, while the significant presence of first-person forms ensures that both doctors and patients are engaged in shared decision-making, expressing self-representation, empathy, and inclusivity. This blend of formality and personal involvement is probably used for effective and empathetic doctor-patient relationships in Hungarian medical consultations. In comparison, the findings by Giménez-Moreno and Ricart-Vavá (2022) highlight notable differences in the use of person deixis in Spanish and English online medical consultations. Their study found that English doctors frequently use second-person pronouns to emphasize patient individuality and engagement, whereas Spanish doctors use such pronouns less often, focusing instead on impersonal constructions. These findings underline the importance of cultural and linguistic context in shaping effective doctor-patient interactions. Understanding these nuances can inform best practices to enhance healthcare communication globally, fostering improved patient outcomes and satisfaction. In the following qualitative analysis, we will shed further light on these aspects.

#### 4.2. Verbs as person deixis

This section provides a detailed qualitative analysis of the way person deixis is used in these medical consultations.

#### 4.2.1. Third-person singular verbs: formality, politeness, respect

The high frequency of third-person singular verbs, with 1,569 occurrences, is notable in Hungarian medical consultations. As stated earlier, in formal situations, Hungarian often uses a zero pronoun and third-person singular verb forms to convey respect. This reflects the dual role of these forms as a formal you and as a reference to both the patient and the doctor. According to the Functional Pragmatics framework, such usage highlights the communicative function of maintaining professional distance and politeness, essential for respecting hierarchical relationships in healthcare settings (Kuna & Hámori, 2019). This formality aligns with Mey's (2001) emphasis on the importance of context in interpreting deictic expressions, where the use of third-person singular forms ensures clarity and respect in interactions. The prevalent use of third-person singular verbs is driven by the cultural emphasis on politeness and respect, particularly in professional settings like medical consultations. This formal tone helps maintain professional distance and respect, which are crucial for effective doctor-patient communication, as suggested by Kuna (2016). Verbs associated with the third-person singular often involve the GP discussing the patient's condition, symptoms, or necessary actions, such as van '[you] are', tud '[you] know', and kell '[you] have to'. For instance, in example (1) the verb kell 'you have to' is used by the doctor to provide clear and direct instructions. This demonstrates how thirdperson singular verbs are crucial in conveying essential medical directives, aligning with the findings of Mey (2001) on the communicative functions of language.

Reggel kell bevennie éhgyomorra. (GP3)
 You have to take it in the morning on an empty stomach.

The verb van '[you] are' appears 1,250 times, volt '[you] were' 264 times, and lesz '[you] will be' 69 times. This high frequency indicates that, first, van is used in impersonal structures such as rendben van 'it is fine' and itt van a beutalója 'here is your referral'. Van '[you] are' can be attributed to its role in describing the patient's current state, which is a primary focus during consultations. This high frequency indicates that both doctors and patients concentrate on the present condition, which is vital for immediate diagnosis and treatment decisions. The frequent use of third-person singular verbs highlights a communication style that prioritizes formality, respect, and politeness. This approach helps maintain professional boundaries, ensuring that interactions are both effective and respectful, aligning with Kuna's

(2016) observation on the importance of professional distance in Hungarian medical consultations.

#### 4.2.2. First-person singular verbs: self-representation

First-person singular verbs appear 581 times, highlighting their crucial role in both doctor and patient communication. These verbs are instrumental in expressing personal actions, thoughts, and feelings, reflecting the patient-centred nature of medical interactions (Hashim & Safwat, 2013). For patients, first-person singular verbs allow them to directly communicate their symptoms, experiences, and needs. *Tudom* 'I know' is particularly significant, appearing 105 times, with *nem tudom* 'I do not know' making up 95 of these instances. This high frequency of *nem tudom* 'I do not know' reflects patient insecurities and uncertainties about their health conditions, like in example (2).

(2) Nem is volt gondom a cukorral. Nemrég jöhetett elő, de nem tudom mennyire vészes, annyira talán nem. (P23)
I did not have problems with my sugar. It might have come up recently, but I do not know how serious it is, maybe not that much.

 $\acute{Erzem}$  I feel' is used exclusively by patients to describe their physical and emotional symptoms. *Voltam* I was' and *láttam* I saw' are used to discuss past medical visits or observations. *Tudok* I can' expresses the patient's capabilities, such as in performing daily activities or following medical advice.  $\acute{Ertem}$  I understand' is frequently used by patients to confirm their understanding of the doctor's instructions, ensuring clear communication, as seen in example (3).

(3) Éhgyomorra megy, megiszik egy pohár ilyen cukros innivalót, és utána 2 óra múlva újra megmérik a vércukrát. (GP5)
You go on an empty stomach, drink a glass of this sugary drink, and then your blood sugar is measured again after 2 hours.
Ja, értem. (P43)
Ah, I understand.

For doctors, verbs like *javaslom* 'I suggest', *megnézem* 'I will check', *látom* 'I see', *tudom* 'I know', *mondom* 'I say', and *köszönöm* 'I thank' serve to explain diagnoses, suggest treatments, and provide professional insights. *Köszönöm* 'I thank' is used by doctors at the end of consultations to thank the patient for their cooperation, furthering a respectful and courteous interaction. This

dual usage ensures that the consultation is a two-way dialogue, where both the patient's concerns and the doctor's expertise are clearly communicated, fostering a comprehensive and collaborative environment. For both doctors and patients, the frequent use of first-person singular verbs emphasizes the dynamic and interactive nature of medical consultations. This usage underscores the active role patients play in sharing their health status and participating in decision-making processes, as well as the doctor's role in guiding and informing the patient. By allowing both parties to express their thoughts, feelings, and knowledge, these verbs contribute to a patientcentred and collaborative healthcare environment, echoing the findings of Kuna (2016) and Neimah (2024).

# 4.2.3. First-person plural verbs: shared decision-making, inclusivity, empathy

First-person plural verbs, with 312 occurrences, further highlight the collaborative nature of medical consultations. These verbs emphasize shared decision-making and joint efforts between doctors and patients, fostering a sense of partnership and mutual responsibility in managing health. Verbs like *megnézzük* 'we check' and *beszéljük* 'we discuss' create an inclusive dynamics, encouraging patients to feel involved and supported in their healthcare journey. This collaborative approach not only empowers patients but also reinforces the idea that health management is a joint effort, where both parties work together towards common goals, as supported by Kuna (2016) and Hendricks and Imo (2023). One reason for the use of first-person plural verbs is to include other healthcare professionals in the reference, emphasizing that medical examinations are a team effort and not solely the responsibility of the doctor. For instance, examples (4) and (5) show the collaborative nature of medical work, acknowledging that different specialists contribute to the diagnosis and treatment process.

- (4) Akkor csinálunk egy labort, megnézzük, hogy nincs-e benne esetleg hasnyálmirigy betegségre utaló eltérés. (GP1) Then we do a lab test, we check if there is any indication of pancreatic disease.
- (5) Írunk egy beutalót. (GP4)We write a referral.

In other cases, *we* is used as an inclusive pronoun to express empathy and partnership, making the patient feel that the doctor is sharing the experience. Examples (6) and (7) illustrate how doctors use *we* to foster a sense of unity and joint progress.

(6) Igen, de akkor tulajdonképpen most már túl vagyunk a hasmenésen.
 (GP3)

Yes, but actually now we are over the diarrhea.

(7) Az LDL koleszterinből, ugye közelítünk a jóhoz, de azért még nem vagyunk ott. (GP4)
Regarding the LDL cholesterol, we are approaching the good level, but we are not there yet.

This usage conveys empathy and reinforces the bond between the doctor and patient, suggesting that they are tackling the health issue together. This aligns with Kuna's (2016) observations on the use of *we* in doctor-patient interactions. Furthermore, first-person plural verbs indicate mutually undertaken actions, involving not just the doctor and patient, but also other family members or healthcare providers. Examples (8) and (9) demonstrate scenarios where the actions are collectively executed, acknowledging the involvement of other individuals in the context. This shared language reflects the interconnected nature of medical care and the collective effort required to manage health effectively.

- (8) Beszéltük már korábban, hogy van egy alkoholfogyasztás, ami rendszeres. (GP3)
  We have already discussed earlier that there is regular alcohol consumption.
- (9) Megyünk, ahova mennünk kell. (P7)We go where we need to go.

Overall, the use of first-person plural verbs in Hungarian medical consultations underscores the collaborative and inclusive nature of healthcare interactions. By using these verbs, doctors create a supportive and participatory environment, recognizing the contributions of other professionals, expressing empathy, and acknowledging the collective efforts of everyone involved in the patient's care. This linguistic choice enhances the patient-doctor relationship and contributes to a more holistic approach to health management.

#### 4.2.4. Third-person plural verbs: external perspectives

Third-person plural verbs with 168 occurrences add complexity to the communication dynamics. In Hungarian, since the passive voice is not used, what is expressed in English with passive constructions is often conveyed using impersonal third-person plural constructions. These verbs often refer to actions or information from other healthcare professionals or family members, integrating external perspectives into the consultation. This usage ensures a comprehensive approach to the patient's care, acknowledging the contributions and insights from various sources. In example (10), the verb *találtak* 'they found' is used to generally refer to healthcare professionals.

(10) Az epehólyagban találtak egy követ meg egy polipot. (P13)They found a stone and a polyp in the gallbladder.

This exemplifies how third-person plural verbs reflect collaborative diagnostic efforts, focusing on collective medical expertise rather than individual actions, as observed by Odebunmi (2006). Generic observations are also frequently expressed using third-person plural verbs. In example (11), *mondják* 'they say' conveys common societal beliefs or widespread medical opinions without pinpointing a specific source. This reflects how patients integrate communal knowledge into their understanding of health conditions, showing the influence of broader social discourses on individual health perceptions.

 (11) Azt mondják, hogy az időjárás változás az oka a vérnyomásingadozásnak. (P33)
 They say that the weather change is the cause of blood pressure fluctuations.

Doctors similarly use third-person plural verbs to introduce and explain medical concepts, adding credibility and a sense of shared professional consensus to the information. For instance, in example (12), *hinják* 'they call' imparts a sense of universal acknowledgment and acceptance of the term within the medical community, helping patients understand that the information is well-established and reliable, similar to findings by Mao and Zhao (2019).

(12) Tehát van egy olyan rendszer, úgy hívják, hogy glikémiás index, és a legtöbb élelmiszerünknek van egy ilyen indexe. (GP1)So, there is a system they call the glycemic index, and most of our foods have such an index.

These linguistic patterns reveal how third-person plural verbs help incorporate external advice, findings, or observations into the medical discussion, enhancing the thoroughness and accuracy of the consultation. They serve different functions: reflecting collective medical efforts, and integrating societal beliefs. This multifaceted use of third-person plural verbs underscores the complexity and collaborative nature of medical consultations, where diverse sources of knowledge and perspectives are synthesized to ensure comprehensive patient care.

# 4.2.5. Absence of second-person singular and plural verbs: formality and distancing

The absence of second-person singular and plural forms is particularly noteworthy. In Hungarian, as in many languages, second-person forms are used for direct address, which might indicate a more personal or direct interaction. Their absence suggests a formality or a distancing in the GPpatient interaction, which can be interpreted in several ways. It might reflect a professional distance maintained by GPs to keep the conversation objective and clinical, or it could indicate a tendency to speak about the patient's condition in a more impersonal manner, possibly to avoid making the patient feel directly confronted. This indirect approach aligns with medical communication norms in Hungary, where clarity and formality are prioritized to ensure respectful and precise interactions, as noted by Kuna (2016).

All these linguistic patterns reveal important insights into the sociocultural context of (Hungarian) medical practices. The dominance of third-person forms and the absence of second-person pronouns underline a formal relationship between doctors and patients, reflecting a societal norm where the GP is seen as a highly respected figure and the patient as a recipient of expertise. The indirect manner of speaking is a form of respect and formality, aligning with broader societal values that prioritize respectful and deferential communication. The use of first-person plural forms, meanwhile, indicates an effort towards inclusivity and collaboration, suggesting that GPs are encouraging patients to be active participants in their health management. This approach aligns with contemporary movements in healthcare that advocate for patient-centred care, where the patient is seen as an active participant in their health management (Pilling, 2018). The use of person deixis in these consultations illustrates a communication, essential for effective and respectful

doctor-patient interactions. The absence of second-person singular and plural forms further emphasizes the cultural and professional norms that shape these interactions. This study highlights the importance, in medical settings, of understanding linguistic choices, which can significantly impact the quality of healthcare delivery and patient satisfaction.

#### 4.3. Pronouns: self-representation, politeness, formality

This study presents an analysis of the pronouns én T ön, maga 'you' [formal] in Hungarian medical consultations. By examining their frequencies, patterns, and collocates, the analysis provides insights into how these pronouns function to facilitate effective doctor-patient communication. This analysis not only sheds light on patient usage but also highlights how doctors employ these pronouns within consultations, in line with theories by Levinson (1983) and Fillmore (1997).

In the analysed medical consultations, the pronoun én 'I' appeared 193 times, reflecting a strong emphasis on the patient's personal involvement and perspective, while ön 'you' [formal] occurred 95 times, highlighting the formal and respectful tone of doctor-patient interactions, and *maga* 'you' [formal] was used 48 times, indicating an additional layer of formal address that balances respect and a personal connection.

The pronoun én T appeared 193 times in Hungarian medical consultations. This high frequency highlights the importance of first-person deixis in these interactions. Patients frequently use én T to articulate their symptoms, conditions, and needs, actively participating in their healthcare. This active participation is crucial for empowering patients, encouraging them to be involved in decision-making processes, and ensuring they understand their conditions and treatments, supporting the findings by Hashim and Safwat (2013). The collocates of these pronouns are shown in Figure 2 and Table 1.



Figure 2. Collocates of én 'l'.

Category	Hungarian	English
Pronoun Verbs with <i>én</i> 'l' as the subject	én tud javasol mond van	l know suggest say be
Verbs with én 'l' as the object	érkezik van mond kell érkezik	arrive be say have to arrive

Table 1. Collocates of én 'l' in Hungarian and English.

When patients use *én* 'I' with the verb *tud* 'know' they are indicating their awareness and understanding of their condition. This verb allows patients to communicate crucial information about their health status to the doctor. The verb *van* 'be' is used by patients to describe their state or condition, providing essential information about their health status.

On the other hand, the verb *javasol* 'suggest' is commonly used by doctors to propose treatments or actions, highlighting their role in guiding the patient towards better health outcomes. Doctors also use *mond* 'say' to communicate important information to patients, ensuring that instructions and advice are clearly conveyed. *Kell* 'have to' is used by doctors to emphasize the necessity for patients to take certain actions, such as taking medication or following medical advice. Overall, the use of *én* 'I' in these contexts highlights the active role of both patients and doctors in Hungarian medical consultations.

The use of *ön* 'you' [formal] highlights its role in maintaining formality and respect, ensuring that interactions remain professional and respectful both for doctors and patients. The collocates of the pronoun are shown in Figure 3 and Table 2.



Figure 3. Collocates of ön 'you [formal]'.

Category	Hungarian	English (Infinitive)
Pronoun Verbs with <i>ön</i> 'you' [formal] as the object	ön elküld segít tud	you [formal] send help know
Verbs with ön 'you' [formal] as the subject	kell fáj visszavár visszajelez elmond dohányzik	have to hurt expects back give feedback tell smoke
	átmegy szed [gyógyszert] jár	cross take [medicine] frequent

Table 2. Collocates of ön 'you' [formal] in Hungarian and English.

The verbs associated with *ön* 'you' [formal] often relate to actions and responsibilities that require patient compliance, such as *elküld* 'send' and *kell* 'have to'. This usage reflects the doctor's authoritative role in providing instructions and ensuring that patients follow medical advice. The formality and respect conveyed through *ön* 'you' [formal] help build trust and establish a professional rapport, essential for effective doctor-patient communication,

aligning with findings by Kuna (2016). When doctors use this pronoun as an object with verbs like *elküld* 'send' and *kell* 'have to', they emphasize the necessity for patients to follow specific actions. The verb *tud* 'know' is used by doctors to convey important information that patients need to be aware of. Other verbs like *visszavár* 'expects back' and *visszajelez* 'give feedback' reflect the ongoing nature of the doctor-patient relationship, where doctors might say. Additionally, doctors use *dobányzik* 'smoke' in contexts where they might be inquiring about or advising against smoking. These interactions emphasize the importance of continuous communication and follow-up in effective healthcare management.

Patients also use  $\ddot{on}$  'you' [formal] when they need to address the doctor formally. For example, the verb *segit* 'help' can be used in a context where the patient is acknowledging the doctor's assistance. When patients use verbs like *elmond* 'tell' as the subject, it reflects their role in communicating their symptoms and concerns to the doctor. Verbs like *jár* 'frequent' appear in contexts where patients are describing their habits or actions that are relevant to their health. By maintaining formality and respect through  $\ddot{on}$  'you' [formal], doctors build trust and establish a professional rapport with their patients. This formal address helps to ensure that the interactions are perceived as respectful and authoritative, aligning with findings by Kuna (2016) on the importance of formal and respectful communication in medical settings. Doctors and patients also use the other formal pronoun *maga* 'you' [formal], as illustrated by Figure 4 and Table 3.



Figure 4. Collocates of maga 'you' [formal].

Category	Hungarian	English (Infinitive)
Pronoun Verbs with maga 'you' [formal] as the object	maga érzi kialszik mond tönkretesz igyekszik kimond hív	you [formal] feel get enough sleep say ruin strive say call
Verbs with maga 'you' [formal] as the subject	dönt operál meghúz érez lát	decide operate strain feel see

Table 3. Collocates of maga 'you' [formal] in Hungarian and English.

When doctors use *maga* 'you' [formal] as an object with verbs like *érzi* 'feel', they are addressing the patient directly but in a slightly less formal tone than *ön* 'you [formal]'. The other verbs are used in advice, warning the patient or encouraging them and when doctors instruct patients on follow-up actions. Patients use *maga* 'you [formal]' to address the doctor or discuss their actions, especially in contexts that require decisions or descriptions of personal experiences. For example, the verb *dönt* 'decide' reflects the patient's involvement in their health decisions. When patients use verbs like *operál* 'operate' they discuss past or potential medical procedures. The use of *maga* 'you' [formal] in these contexts reflects a level of formality that is less rigid than *ön* 'you' [formal] but still maintains respect. This pronoun is particularly effective in creating a balance between respect and familiarity, which is crucial in building rapport and ensuring clear communication in medical consultations.

The analysis of the pronouns in Hungarian medical consultations provides a comprehensive understanding of their role in facilitating patient-centred, respectful, and effective communication. The frequent and diverse usage of these pronouns underscores their importance in addressing patients' needs, maintaining professional interactions, and empowering patients in their healthcare journeys. These findings contribute to a deeper understanding of linguistic practices in medical settings, ultimately enhancing doctor-patient communication and improving healthcare outcomes.

#### 4.3. Nouns

In Hungarian medical consultations, the use of nouns with possessive suffixes, calls and addresses plays an important role in personalizing and specifying health-related terms. The most frequent ones are shown in Table 4.

Category	Hungarian	English
Nouns with possessive suffixes		
Nouns with first-person singular possessive suffix	kérdésem problémám kérésem gyomrom székletem fejem hányingerem fájdalmaim	my question my problem my request my stomach my head my nausea my nausea my pains
Nouns with third-person singular possessive suffix	panasz <b>a</b> eltérés <b>e</b> eredmény <b>e</b>	your complaint [formal] your deviation [formal] your result [formal]
Nouns indicating family relationships	felesége lány <b>a</b>	your wife [formal] your daughter [formal]
Calls and addresses	•	
	doktor <b>úr</b> doktor <b>nő</b>	doctor [male], literally doctor sir doctor [female], literally doctor woman

Table 4. Most frequent nouns used as person deixis.

The corpus contains 130 nouns with possessive suffixes of first-person singular. Terms like kérdésem 'my question', problem'am 'my problem', and kérésem 'my request' highlight the patient's active role in the consultation, emphasizing their involvement in discussions. For instance, kérdésem 'my question' indicates patient inquiries, problémám 'my problem' denotes personal health issues, and kérésem 'my request' reflects patient needs or desires. Terms such as gyomrom 'my stomach', székletem 'my stool', and fejem 'my head' provide direct information about the patient's physical condition, ensuring the doctor understands the exact issues being discussed. Symptom descriptions with possessive suffixes, like hányingerem 'my nausea' and fájdalmaim 'my pains', directly communicate the patient's symptoms. In the context of third-person singular, which appeared 45 times, terms such as panasza 'your complaint' [formal], eltérése 'your deviation' [formal], and eredménye 'your result' [formal] illustrate questions on behalf of the doctor. Nouns indicating family relationships are relevant in consultations involving family health history or decisions. These terms highlight the involvement of family members in the patient's care.

In addition to verbs, pronouns, and nouns, in Hungarian medical consultations, calls and addresses are used for maintaining appropriate levels of respect, formality, and politeness, like *doktor úr* 'doctor' [male]. However, *asszony* 'madam' associated with a female doctor is only used if the doctor has achieved a higher rank, for example, *főorvos asszony* 'chief physician' [female]. *Doktornő* literally means 'doctor woman' and not 'doctor madam'. Formal titles such as *úr* 'sir' are used to address male patients formally, reflecting societal expectations of politeness and respect in professional settings. Personal names are used depending on the formality of the context.

In medical consultations, first names are typically used when the patient and doctor have a more personal or less formal relationship, which can be explained by the fact that a GP-patient relationship is generally longer and more intimate compared to other specialties. Combining titles with personal names balances respect and personalization, ensuring formal yet individualized interactions.

The findings illustrate that Hungarian doctor-patient consultations are characterized by a high degree of personalization and respect. The use of possessive suffixes and relational terms ensures that interactions are specific, focused, and respectful, which is crucial for effective communication, accurate diagnosis, and patient satisfaction. Personalized terms engage patients more effectively, fostering a sense of involvement and empowerment in their healthcare decisions. Respectful and precise language builds trust between doctors and patients, making patients more likely to trust the doctor's expertise and follow recommendations.

These linguistic patterns reflect broader societal norms in Hungary, where personalization, clarity, and respect are highly valued. The use of possessive suffixes in medical consultations underscores the importance of clear, respectful, and patient-centred communication, highlighting the adaptability of Hungarian to maintain cultural values through its grammatical structures. Understanding these patterns enhances comprehension of doctor-patient relationships and communication strategies, contributing to better healthcare outcomes and more effective medical interactions.

# 5. Conclusions

The analysis of person deixis within medical consultations has unveiled a complex interplay between language, culture, and professional dynamics. These findings shed light on how linguistic choices shape doctor-patient interactions.

The prevalence of third-person singular verbs used as formal *you*, observed throughout the corpus, underscores Hungarian societal norms. Within medical discourse, these linguistic markers serve to establish and maintain professional boundaries, ensuring that interactions are conducted with the appropriate level of formality and respect. Patients, through the linguistic agency of *I*, assert their presence in the dialogue, articulating their symptoms, experiences, and concerns. The use of first-person singular forms can foster a patient-centric

approach to healthcare, wherein patients are not passive recipients of medical advice but active participants in the decision-making process. The absence of second-person singular and plural forms suggests a deliberate choice to maintain a degree of professional distance and formality in doctor-patient interactions. This absence may reflect a cultural preference for maintaining professional boundaries while facilitating open communication channels between healthcare providers and patients. As the trend towards utilizing formal language in various official settings continues to grow, it could potentially influence doctor-patient communication in the near future.

The analysis of personal pronouns provides insights into the dynamics of doctor-patient interactions. Each pronoun carries its own sociolinguistic value. The selection of these pronouns allows doctors to navigate the delicate balance between professionalism, respect and empathy. Moreover, nouns with possessive suffixes integrate a personal dimension into medical discourse, while calls and addresses are used for maintaining politeness. Personal names are also used depending on the formality of the context.

Future research in this domain should consider several avenues for further investigation. Longitudinal studies could explore how linguistic patterns evolve over time within (Hungarian) medical consultations, considering factors such as changing cultural norms, free and easy access to health information, advances in medical technology, and shifts in healthcare communication. Comparative analyses could also be conducted to examine linguistic variations across different cultures and languages, medical specialties or between urban and rural healthcare settings. Furthermore, qualitative studies incorporating patient perspectives could provide valuable insights into how linguistic choices impact patient satisfaction, trust, and perceived quality of care. Overall, future research should aim to deepen our understanding of the interplay between language, culture and healthcare, with the ultimate goal of enhancing communication efficacy and patient outcomes.

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## References

Bálint, M. (1957). *The doctor, his patient and the illness*. Pittman.

Bigi, S. (2016). Communicating (with) care: A linguistic approach to the study of doctor-patient interactions. IOS Press.

Blommaert, J. (2008). Discourse: A critical introduction. *Linguistische Berichte (LB)*, 2008(214), 121-127. https://doi.org/10.46771/2366077500214\_7

Bragard, I., Razavi, D., Marchal, S., Merckaert, I., Delvaux, N., Libert, Y., Reynaert, C., Boniver, J., Klastersky, J., Scalliet, P., & Etienne, A. M. (2006). Teaching communication and stress management skills to junior physicians dealing with cancer patients: a Belgian Interuniversity Curriculum. *Supportive Care in Cancer*, *14*(5), 454-461. https://doi.org/10.1007/s00520-005-0008-3

Csabai, M., Csörsz, I., & Szili, K. (2009). A gyógyító kapcsolat élménye. Kézikönyv ésoktatólemez a kapcsolati készségek fejlesztéséhez [The experience of a healing relationship. Handbook and training disk for developing relationship skills]. Oriold és Társa Kiadó.

Domonkosi, Á. (2018). The socio-cultural values of Hungarian V forms of address. *Eruditio - Educatio*, *13*(3), 61-67. http://e-eruditio.ujs.sk/archive/2018-11-26\_EE\_2018\_3\_NYOMDAKESZ\_Belivek.pdf

Fillmore, C. J. (1997). *Lectures on deixis*. Cambridge University Press.

Ghosh, A. K., Joshi, S., & Ghosh, A. (2020). Effective patient-physician communication: A concise review. *Journal of the Association of Physicians of India*, 68(6), 53-57.

Giménez-Moreno, R., & Ricart-Vayá, A. (2022). The expression of emotions in online medical consultations: A comprehensive Spanish-English analysis. *Ibérica, Journal of the European Association of Languages for Specific Purposes, 44,* 239-262. https://doi.org/10.17398/2340-2784.44.239

Hashim, S. S. M., & Safwat, S. (2013). Deixis in the language of nursing. *Journal of Zankoy Sulaimani*, 39(3), 247-262.

Heritage, J., & Maynard, D. W. (Eds.) (2006). Communication in medical care: Interaction between primary care physicians and patients. Cambridge University Press.

Hendricks, D., & Imo, W. (2023). Ärztliche Therapieentscheidungsempfehlungen in der Onkologie und die Rolle des Personalpronomens wir bei der Aushandlung ärztlicher agency [Medical therapy recommendations in oncology and the role of the personal pronoun we in the negotiation of medical agency]. Zeitschrift für Angewandte Linguistik, 79, 163-194. https://doi.org/10.1515/ zfal-2023-2011

Kuna, Á. (2016). Person deixis and selfrepresentation in medical discourse: Usage patterns of first person deictic elements in communication by doctors. Jezyk, Komunikacja, Informacja/Language, Communication, Information, 11, 99-121.

Kuna, Á., & Domonkosi, Á. (2022). Társas deixis és kapcsolatépítés orvos-beteg konzultációk oktatóvideóiban [Social deixis and relationship building in educational videos of doctor-patient consultations]. In K. Lackó & S. Tátrai (Eds.), *Tanulmányok a deixisről* (pp. 251-278). Eötvös Kollégium.

Kuna, Á., & Hámori, Á. (2019). "Hallgatom, mi a panasz?" A metapragmatikai reflexiók szerepei és mintázatai az orvos-beteg interakciókban ["I'm listening, what's the complaint?" The roles and patterns of metapragmatic reflexions in doctorpatient interactions.]. In S. Tátrai (Ed.), *Kontextualizáció és metapragmatikai tudatosság* (pp. 215-239). Eötvös Collegium.

Levinson, S. C. (1983). *Pragmatics*. Cambridge University Press.

Mao, Y., & Zhao, X. (2019). I am a doctor, and here is my proof: Chinese doctors' identity constructed on the online medical consultation websites. *Health Communication*, 34(13), 1645-1652. https://doi.org/10.1080/10410236.2018.1517635

Mey, J. (2001). *Pragmatics: An introduction*. Routledge.

Naughton, C. A. (2018). Patient-centered communication. *Pharmacy*, 6(1), 18. https://doi. org/10.3390/pharmacy6010018

Neimah, H. K. (2024). Investigating deixis in medicine leaflets. *Journal of the College of Education for Humanities*, 14(1), 27-42.

Odebunmi, A. (2006). Locutions in medical discourse in Southwestern Nigeria. *Pragmatics*, 16(1), 25-41. https://doi.org/10.1075/prag.16.1. 04ode

Pilling, J. (2018). Orvosi kommunikáció a gyakorlatban [Medical communication in practice]. Medicina.

Riedl, D., & Schüßler, G. (2017). The influence of doctor-patient communication on health outcomes:

A systematic review. Zeitschrift für Psychosomatische Medizin und Psychotherapie, 63(2), 131-150. https://doi.org/10.13109/zptm. 2017.63.2.131

Street, R. L., Makoul, G., Arora, N. K., & Epstein, R. M. (2009). How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Education and*  Counseling, 74(3), 295-301. https://doi.org/ 10.1016/j.pec.2008.11.015

Tátrai, S. (2011). *Bevezetés a pragmatikába* [*Introduction to Pragmatics*]. Tinta Könyvkiadó.

Yule, G. (1996). *Pragmatics.* Oxford University Press.

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