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Explanatory language in dental informed consent communication

Anastasiia Pysarenko¹, Viktoriia Kostenko²¹ Master Student, Poltava State Medical University, Poltava, Ukraine² Associate Professor, Candidate of Philological Sciences, Department of Foreign Languages, Latin and Medical Terminology, Poltava State Medical University, Poltava, Ukraine**Address for correspondence:**

Viktoriia Kostenko

E-mail: vik.kostenko@pdmu.edu.ua

Abstract: *Informed consent is a legal and ethical cornerstone of dental care, yet its effectiveness depends not only on content but also on clarity of communication. While existing research extensively covers the ethical and legal aspects, less attention has been given to the linguistic strategies that shape patient comprehension. This study examines the use of code glosses, i.e. in-text clarifications of technical terms, in 50 informed consent forms (ICFs) used in U.S. dental practices. Using Hyland's metadiscourse model and the Text Inspector tool, glosses were identified, categorized, and analyzed across different sections of the forms. Results show that Explanation glosses dominate (45.9%), with Implication and Exemplification glosses each at 19.7%. Most glosses appear in Procedure (30%) and Diagnosis (28%) sections, while fewer are found in Risk (22%) and Consent statements (10%). These findings highlight areas where patients may receive insufficient support to understand complex or abstract information, particularly when it comes to making truly informed choices. Glosses improve readability by unpacking specialized language and reducing cognitive load, especially under conditions of stress or limited health literacy. Despite their benefits, certain gloss types, such as analogies or conditionally phrased advisories, remain underused, possibly due to legal caution or a preference for standardized phrasing. The study underscores that code glosses are essential communicative tools, not mere stylistic additions. Greater integration of patient-friendly language and multimodal strategies is recommended to strengthen informed consent practices and promote clearer, more equitable healthcare communication.*

Keywords: [Dental Care](#), [Health Communication](#), [Informed Consent](#), [Patient-Centered Care](#), [Patient Education](#), [Terminology](#).

Introduction

Informed consent is a cornerstone of ethical and legal dental practice, ensuring that patients make voluntary and informed decisions about their treatment. The concept of informed consent involves a process where patients voluntarily agree to treatment after being informed about its advantages, risks, alternatives, and potential consequences. In dentistry, as well as in heal-

thcare more broadly, informed consent is not only an ethical obligation but also a legal requirement. It protects patient autonomy, promotes transparency in the patient-provider relationship, and serves as a safeguard against potential legal disputes. The failure to obtain proper informed consent may lead to legal liability for negligence or battery, even if the clinical outcome is successful. Moreover,

informed consent functions as both a procedural and communicative act, requiring not just the presentation of information, but its meaningful exchange and patient comprehension.

Informed consent has been a subject of extensive research across multiple disciplines, including medicine [1 – 3], law [4 – 6], nursing [7 – 9], bioethics [10 – 12], sociology [13 – 15], and psychology [16 – 18]. By 2003, over 4,000 empirical studies had been published on the topic, reflecting its critical role in modern healthcare ethics and communication [10]. However, despite this extensive literature, there remains a significant gap in exploring the discursive and linguistic dimensions of consent forms as communicative instruments. Recent studies have highlighted the challenges posed by complex language in consent documents, which can hinder participant comprehension and undermine the consent process [3; 9; 10]. For instance, a 2017 computational linguistic analysis revealed that many consent form templates use language exceeding the recommended reading level, potentially impeding participant understanding [19]. Other research emphasizes the need for clearer language and more inclusive communication strategies to ensure truly informed consent [20; 21; 22]. Kazembe D. M. et al. identified long and complex consent forms as major barriers to participant understanding, recommending efforts to simplify language, use demonstrations, and allow repeated explanations to improve comprehension [20]. Santel F. et al. emphasized that technical language and ambiguity in consent forms negatively impact participant understanding and compliance [21]. Goldshmitt M. et al. reviewed digitalization of informed consent, highlighting AI-driven chatbots and large language models like ChatGPT to simplify consent materials, provide personalized explanations, and improve patient comprehension and engagement [23]. These findings as well as extensive existing literature underscore the importance of addressing linguistic and cultural barriers to enhance the effectiveness of informed consent as a communicative act.

Building on these concerns, evidence from dental settings further illustrates how

inadequate communication can compromise the consent process [24; 25]. A substantial number of dental practices fail to provide sufficient verbal explanations alongside written forms, heightening the risk of misunderstanding or misinterpretation. The use of specialized medical terminology, for example, prosthodontics or periodontitis, can be particularly problematic for individuals without a healthcare background [26]. This challenge is further intensified by systemic constraints: clinicians' time with patients is increasingly restricted by regulatory requirements, documentation and billing tasks, administrative responsibilities, and broader market pressures, all of which reduce opportunities to deliver thorough explanations as mentioned by Bala S. and co-authors [27]. Whether informed consent forms are presented on paper or through digital platforms, patients often face comparable challenges in navigating lengthy and complex text. Online formats may improve accessibility and standardization, but they do not automatically resolve issues of readability, jargon, or cognitive overload [28; 29]. Indeed, electronic forms may even introduce new barriers, such as limited digital literacy, distractions from multitasking, or difficulties in engaging with static text on screens [30]. Conversely, some studies suggest that interactive digital consent systems, those incorporating visuals, videos, or adaptive explanations, can enhance comprehension and recall when compared with traditional written documents [31]. Nevertheless, the core difficulty remains: patients must still struggle through highly technical content, often at moments of heightened anxiety, regardless of the medium.

Compounding this issue, emotional factors often affect patients' ability to process complex information. High levels of anxiety or distress can impair cognitive functioning, leading patients to feel overwhelmed or disengaged [32]. These emotional states not only reduce information retention but can also distort patients' perceptions of risks and benefits, ultimately impairing their capacity for informed decision-making [22; 33, 34]. Individuals experiencing anxiety often struggle to fully comprehend and retain the information

provided by healthcare professionals, which further complicates their ability to process essential medical details [35]. Thus, beyond linguistic complexity, both emotional and contextual factors play a critical role in shaping the efficacy of informed consent, particularly in high-stress clinical environments.

In response to these challenges, researchers and practitioners have turned to linguistic strategies aimed at enhancing clarity and supporting informed decision-making. One such strategy is the use of code glosses – brief, in-text explanations that clarify technical or specialized terms [36]. Recognized in discourse analysis as one of key elements of metadiscourse, code glosses serve both textual and interpersonal functions [37; 38]. They help readers navigate dense medical language by providing definitions, reformulations, or illustrative examples, thereby making unfamiliar content more accessible. In the context of informed consent forms, code glosses can significantly improve comprehension and promote patient autonomy by reducing the cognitive load associated with complex terminology.

Within medical and dental discourse, particularly in legally binding documents such as consent forms, code glosses function as textual signposts, guiding the reader's attention to essential terms while fostering clarity and transparency. In their recent studies, Hyland K. and co-authors emphasize their dual role in enhancing understanding and fulfilling ethical obligations regarding patient information disclosure [39 – 41]. By incorporating glosses, healthcare providers can better accommodate patients with diverse levels of health literacy, ensuring that critical procedural information, risks, and alternatives are comprehensible. Furthermore, the use of code glosses has been linked to reduced cognitive overload, which is especially important in emotionally charged settings such as hospitals [19; 42]. Contemporary linguistic research also advocates for multimodal glossing, combining textual explanations with visual aids or analogies to support comprehension, particularly for low-literacy or multilingual populations [43 – 45]. This evolving approach positions code glosses

not as superficial clarifications, but as essential communicative tools that enhance equity, inclusion, and ethical patient care.

Aim

The purpose of this study is to examine the integration and distribution of code glosses in dentistry informed consent forms (ICFs), with a particular focus on their role in enhancing textual clarity, reducing miscommunication, and promoting patient autonomy. Grounded in both practical and academic concerns, this research emphasizes the alignment of gloss usage with patient-centered care principles, as well as legal and ethical standards of transparency. Specifically, the study aims to analyze how code glosses are employed across various sections of informed consent documents, categorize them by linguistic and functional types, and evaluate their effectiveness in supporting patient understanding of medical and procedural terminology. The research also seeks to identify usage patterns across different dental specialties, contributing to the development of more accessible, ethically sound, and communicatively effective consent practices in dental care.

Materials and methods

This study adopts a descriptive and exploratory approach, aiming to examine metadiscourse features as they naturally occur in written texts. The identification and categorization of metadiscourse elements, particularly code glosses, is grounded in Hyland's metadiscourse model [36].

The data set comprises a corpus of 50 original ICFs for dental treatment and procedures used within the U.S. healthcare system by providers authorized to deliver oral and dental services. The forms were retrieved using the Google search engine, with documents sourced from reputable platforms including Open Dental Software, the American Dental Association (ADA) dental records reference, and Delta Dental Incorporation.

To analyze metadiscourse markers, the texts were processed using *Text Inspector*, a professional web-based linguistic analysis tool. This platform identifies fourteen categories of metadiscourse markers based on the classification system developed by Bax S. et al [46], which

expand upon Hyland's original taxonomy [36]. The results of the metadiscourse analysis, generated by *Text Inspector*, were visually represented in bar charts (Fig. 1), enabling quantitative insights into distribution patterns.

Within each ICF, code glosses were identified and systematically categorized. Their percentage distribution was calculated to detect usage patterns across different sections of the forms. Furthermore, the glosses were assessed in terms of clarity, relevance, and accessibility, particularly in linguistically dense sections such as *Procedure descriptions* and *Risk disclosures*. This multi-level analysis provided a comprehensive understanding of the role glosses play in enhancing patient comprehension within this type of medical documentation.

Results and Discussion

The analysis of a corpus comprising 50 randomly selected dentistry ICFs revealed coverage across a broad spectrum of dental procedures. Surgical and anesthesia-related interventions accounted for the largest proportion (40%), followed by orthopedic and orthodontic treatments (25%); therapeutic procedures (20%)

and cosmetic dentistry (15%) were found to represent the smaller shares.

Each ICF was systematically analyzed for the presence of code glosses, metadiscursive devices that clarify or elaborate on specialized terminology and procedural details. These markers were categorized into five functional types, based on K. Hyland's taxonomy [36] and recent discourse-analytic frameworks:

1. Explanation (e.g., 'that is', 'in other words'): defines or rephrases technical dental terms (e.g., 'apicoectomy, that is, surgical removal of a root tip of the tooth').

2. Implication (e.g., 'this means', 'therefore'): emphasizes outcomes or significance (e.g., 'Local anesthesia will be used; this means you may feel pressure but no pain').

3. Specification (e.g., 'specifically', 'particularly'): narrows general instructions to precise situations (e.g., 'Avoid hard foods, specifically nuts or raw vegetables').

4. Exemplification (e.g., 'for example', 'such as'): offers tangible examples (e.g., 'Risks include bleeding, such as prolonged oozing from the extraction site').

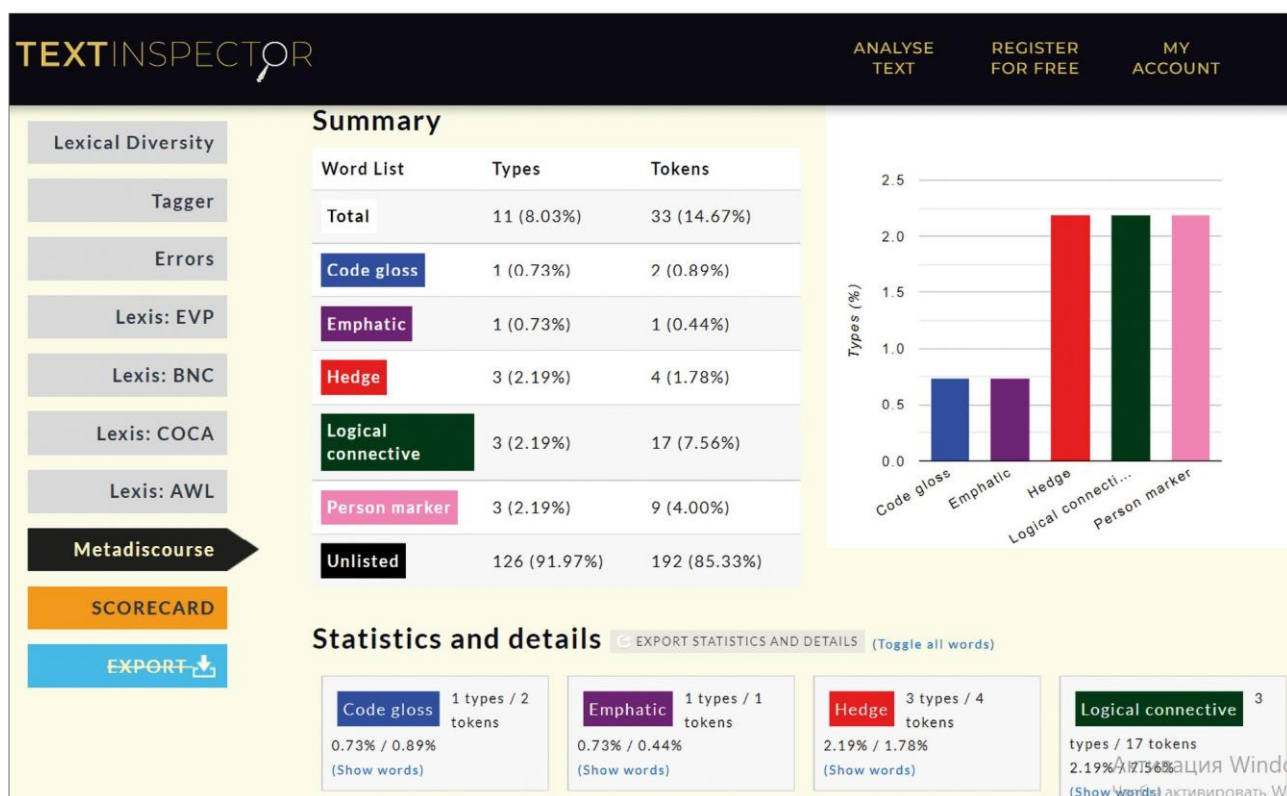


Fig. 1. Results of the Metadiscourse Analysis via Text Inspector

5. Others: encompasses less conventional or hybrid glosses, including analogies and metaphors, which often serve to make abstract concepts more relatable (e.g., *'The implant fuses with the bone like a natural tooth root'*).

Applying Hyland's classification sheds light on how code glosses bridge technical and patient-friendly language, reinforcing ethical and legal standards for comprehensibility in ICFs. Words such as *that is, for example, this means, specifically*, etc. function as metadiscursive signaling expressions that precede explanations, clarifications, or elaborations. Rather than contributing directly to the propositional content, they guide readers through the text by indicating how to interpret the surrounding information. Operating at both the textual and interpersonal levels, these pragmatic markers, typically categorized as adverbial phrases, enhance cohesion, support reader comprehension, and facilitate logical flow within informed consent forms.

The above functional categorization can offer a nuanced understanding of how glossing strategies support patient comprehension and contribute to more transparent and ethically responsible communication in dental consent practices. The distribution of gloss types across the analyzed corpus further emphasizes this communicative role.

The distribution of gloss types across the analyzed corpus highlights their distinct communicative functions (Fig. 2).

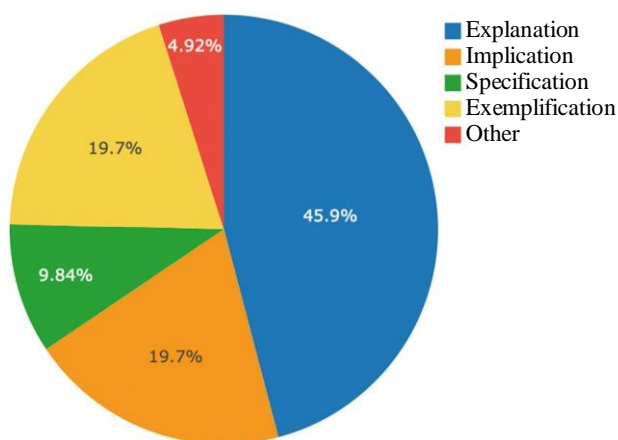


Fig. 2. Distribution of Code Gloss Types by Communicative Function in Dental Informed Consent Forms

Explanation glosses were by far the most prevalent, comprising 45.9% of all cases and signaling a strong emphasis on the direct clarification of dental terminology, e. g.:

Osteomyelitis (a bone infection) may begin. [59]

A crown, bridge, veneer (cosmetic cover), natural crown, a dental restoration or my natural tooth may break or crack because of the root canal treatment. [60]

Local anesthesia (injection) with oral premedication (pills before treatment). Informed consent and permission form – extractions. [61]

Implication and Exemplification glosses each accounted for 19.7%, approximately half the frequency of Explanations, underscoring their importance in contextualizing procedures and illustrating potential outcomes to aid interpretation. Within dental informed consent forms, implications serve as interpretive bridges between medical facts and patient understanding. They translate clinical risks into what these may mean for a patient's oral health, treatment, or daily life, thereby guiding readers toward clear conclusions, for example:

There is a high risk of damage to the restoration which may mean loss of porcelain or fracture. [62]

This may require transferring it to _____, where there isn't enough bone support (usually for placing dental implants). [63]

Failure to have a permanent restoration placed within 6 weeks following root canal treatment may result in leakage of the temporary restoration and reinfection of the root canals (requiring retreatment of the root canal) or fracture of the tooth (often requiring extraction). [60]

Exemplification glosses stand out because they anchor abstract, technical, or vague risks into familiar, concrete experiences. Unlike explanation glosses, which rephrase or define a term, specification glosses, which narrow general statements to precise situations, or implication glosses, which stress consequences, exemplification relies on vivid, patient-friendly examples that reduce abstraction and aid recall. In the context of medical settings, where patients

are often confronted with dense medical or legal terminology, exemplification serves as a quite appropriate strategy for scaffolding comprehension [47 – 48]. For example:

Materials such as biodentine can help where nerve near nerve exposure is found (IC for Root Canal Treatment). [60]

Very sticky food, including some types of gum, sticky candies such as caramels, some licorices, very hard substances, etc., can cause loosening or dislodgment of the sealant. [64]

By offering concrete illustrations, clinicians make technical concepts tangible and relatable [36, 49].

Exemplification also aligns with findings in health communication research, which shows that patients process and retain information more effectively when it is presented through specific, everyday examples rather than abstract generalities [50 – 51]. For instance, the U.S. National Institutes of Health (NIH, 2017) recommends that risk communication should “include concrete examples that illustrate how a risk might be experienced in real life”, as this improves patient understanding and decision-making [52]. Similarly, Spence P. et al demonstrate that the use of exemplars in medical risk communication enhances not only comprehension but also trust, as patients perceive the information as more transparent and accessible [53]. Informed consent in dentistry often involves discussing abstract risks such as ‘possible complications’, ‘failure of treatment’, or ‘post-operative discomfort’. Without exemplification, such terms may remain too vague for patients to grasp their practical implications. However, by embedding glosses like ‘post-operative discomfort, such as swelling or tenderness when chewing’, practitioners bridge the cognitive gap between professional terminology and patient experience. This strategy reduces uncertainty, mitigates anxiety, and supports ethical principles of autonomy by ensuring patients can make genuinely informed choices [54 – 55]. Taken together, Exemplification glosses are not merely stylistic devices but evidence-based communicative tools that make complex medical information concrete, memorable, and actionable for

patients, thereby enhancing the quality of informed consent.

Specification glosses were less frequent, comprising 9.84% of the total. While still valuable, their more limited use may reflect the nature of informed consent documents, which often prioritize general explanations over situational details. Because these texts are typically designed for broad applicability across patients and scenarios, there may be fewer opportunities, or less perceived necessity, for narrowing general instructions to specific cases. For example:

Even though in the majority of the cases (whitening, bleaching, bonding and veneering teeth) there is usually no appreciable sensitivity, this type of treatment may cause teeth to become sensitive. [59]

I understand that the process of fabricating and fitting removable prosthetic appliances (partial dentures and/or complete artificial dentures) includes risks and possible failures. [65]

Other glosses, including analogies, hybrid glosses, or conditionally phrased advisories, comprised only 4.92% of the total. Here are some examples:

Hybrid gloss: *Crowns and bridges are not as strong as natural teeth and extra care is needed to avoid undue trauma to them such as wearing mouth-guards during sports.* [65]

Analogue: *Occasionally, the canals are calcified or blocked, preventing sealing of the root end. Similarly, instruments tips occasionally break off within the canal preventing sealing of the root end.* [60]

Conditionally phrased advisories: *If you do not follow post-operative instructions, healing may be delayed.* [59]

The analogies include concrete comparison (e. g. crowns vs natural teeth) to help patients understand limitations in familiar terms; the advisories, often use modal verbs like *may*, *might*, *could*, or conditional phrases like *if*, *in case*, *depending on* to indicate conditionality and tend to blend description of what *could* happen with what *might* make those risks more likely (pre-disposing factors, patient behavior, etc.). The advisories typically point out potential risks,

side effects, or procedural outcomes without overpromising or creating legal liability and emphasize the role of patient compliance in recovery outcomes: they are a cautious way to clarify uncertainties while still informing the patient.

The relatively low frequency of these residual glosses may be attributed to the inherently cautious and standardized nature of medical-legal documents like ICFs. While such glosses can be rhetorically powerful and helpful in making abstract concepts more relatable (e.g., comparing an implant to a natural tooth root), they may also introduce ambiguity or unintended interpretations.

As a result, healthcare professionals and legal advisors may limit their use to avoid miscommunication or legal liability. Furthermore, the use of figurative or non-literal language is less common in technical writing, which often prioritizes precision, neutrality, and clarity over creativity or personalization. Consequently, these glosses tend to appear only in cases where a more accessible or empathetic explanation is considered essential to patient understanding.

In addition to functional classification, each gloss was mapped to the specific section of the consent form in which it appeared, including *Description of the procedure/treatment*, *Diagnosis or condition information*, *Risks and potential complications*, and *Voluntary consent statements*. The percentage distribution of gloss types was calculated to identify dominant patterns and potential areas of linguistic complexity or patient misunderstanding. The analysis revealed that the highest proportion of glosses (30%) appeared in the section describing the procedure or treatment, followed closely by 28% in the section providing diagnosis or information about the condition requiring treatment. Glosses related to possible risks and complications accounted for 22%, while only 10% were found in the patient's voluntary consent section. These findings suggest that the most conceptually and linguistically dense sections, particularly those explaining procedures and diagnoses, may benefit from enhanced clarity and additional support to facilitate patient comprehension.

The observed distribution indicates prioritized a focused effort to ensure terminological clarity and enhance patient understanding in consent form sections that involve greater conceptual or procedural complexity. The predominance of explanation glosses reflects purposeful linguistic adjustments aimed at supporting informed decision-making in high-stakes dental contexts, where miscommunication may compromise patient autonomy or adherence. These results point to the need for targeted improvements in patient-healthcare provider communication, including practitioner training in the consistent and effective use of metadiscursive clarification strategies.

Gloss usage within informed consent documents demonstrates a clear strategy to improve comprehension and reduce ambiguity. The frequent inclusion of explanation glosses shows an intent to make technical dental language more accessible by rephrasing or unpacking key terms. This is especially critical in sections detailing procedures and diagnoses, where accurate understanding is essential. The comparable presence of implication and exemplification glosses further enhances interpretability by providing contextual cues and concrete examples that aid patient processing of complex information.

The lower frequency of specification and other glosses may indicate areas where consent form designers rely less on nuanced clarification, potentially because the content is more straightforward, or due to space constraints. However, these underused gloss types could offer additional support, particularly for patients with lower health literacy levels.

From a clinical communication perspective, the strategic placement of glosses within complex sections of the form points to an awareness, whether conscious or intuitive, of where patients are most likely to struggle. These findings align with existing research highlighting the importance of clarity and plain language in legal and medical documentation [30, 56 – 58].

However, the overall effectiveness of glosses also depends on their clarity, tone, and relevance. A gloss that is too technical or too vague may do little to aid comprehension. This reinforces

the need for patient-centered design principles, where consent forms are co-developed or tested with actual patients, ensuring that linguistic strategies such as glossing serve their intended purpose: enhancing understanding, not merely expanding content.

Limitations

While this study provides valuable insights into the role of code glosses in enhancing the readability and communicative clarity of dental ICFs, several limitations should be acknowledged. First, the sample size was limited to a specific set of consent forms from dental clinics and academic institutions, which may not fully represent the diversity of ICFs used across regions, specializations, or healthcare systems. The generalizability of the findings may therefore be constrained by institutional or cultural variations in document design and language use.

Second, the study focused exclusively on the linguistic features of the written consent forms and did not include patient feedback or comprehension assessments. As a result, while the functional categorization of glosses provides a useful framework for assessing potential clarity, it does not offer conclusive evidence about their effectiveness in practice. Moreover, individual differences in health literacy, language proficiency, and prior dental knowledge may significantly mediate how patients interpret and benefit from these clarifying strategies.

Third, the study did not assess visual or multimodal elements that may accompany or support textual content in ICFs such as diagrams, icons, or formatting features, which can also play a critical role in shaping understanding.

Future research should aim to address these limitations by incorporating mixed-methods approaches, combining textual analysis with patient surveys, interviews, or comprehension testing. Investigating how different patient groups (e.g., varying in literacy level, language background, or age) interpret glosses would offer critical insights into tailoring consent materials for inclusivity and equity. Exploring the integration of digital or multimedia consent formats (e.g., interactive forms with embedded glosses, audio explanations, or visuals) presents

a promising avenue for future innovation in consent communication.

Conclusion. This study shows that code glosses are vital for enhancing patient comprehension and safeguarding ethical principles of autonomy and informed decision-making. Nearly half (45.9%) of glosses served to explain technical terms, underscoring the central role of definitional clarity in dental communication. Their frequent use in procedure (30%) and diagnostic (28%) descriptions highlights clinicians' awareness of patient needs in complex areas, while their relative absence in risk and consent sections raises concern about patients' ability to make fully informed choices.

Clear and patient-centered communication is fundamental to ethically robust informed consent. For Ukrainian healthcare, where rebuilding trust and ensuring transparency are especially important in the context of war-related stress and ongoing reform, strengthening informed consent practices is a pressing priority. Improving how risks, benefits, and patient rights are communicated can help ensure that consent is not only a formality but a genuine expression of understanding and autonomy. Expanding these practices, supported by patient feedback and cross-cultural analysis, will contribute to more ethically sound and legally resilient healthcare delivery.

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This study had not obtained external funding.

Conflicts of interest

Authors have no conflict of interest to declare.

AI disclosure

The authors declare that no AI tools were used in the generation of content, data analysis, or drafting of this article.

Consent to publication

All authors agreed to publish this manuscript. All authors have read and approved the final version of the manuscript.

Ethical Considerations

This study involved a text-based linguistic analysis of publicly available informed consent documents and did not include any human participants or personal data. Therefore, ethical approval was not required. The study complies with the principles of the Declaration of Helsinki

(2013 version) regarding ethical standards in biomedical research involving human subjects, particularly in its emphasis on transparency and informed decision-making.

Author Contributions (CRediT taxonomy)

Conceptualization: Viktoriia Kostenko (ORCID: [0000-0001-9077-2191](https://orcid.org/0000-0001-9077-2191));

Methodology: Viktoriia Kostenko;

Software: Anastasiia Pysarenko;

Validation: Viktoriia Kostenko;

Formal Analysis: Viktoriia Kostenko, Anastasiia Pysarenko;

Investigation: Anastasiia Pysarenko, Viktoriia Kostenko;

Resources: Anastasiia Pysarenko, Viktoriia Kostenko

Data Curation: Viktoriia Kostenko;

Writing – Original Draft: Anastasiia Pysarenko;

Writing – Review & Editing: Viktoriia Kostenko;

Visualization: Anastasiia Pysarenko;

Supervision: Viktoriia Kostenko;

Project Administration: Viktoriia Kostenko;

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Пояснювальні стратегії у процесі отримання інформованої згоди в стоматологічній практиці

Анастасія Писаренко¹, Вікторія Костенко²

¹ Студентка, Полтавський державний медичний університет, м. Полтава, Україна

² Доцент, кафедра іноземних мов з латинською мовою та медичною термінологією, Полтавський державний медичний університет, м. Полтава, Україна

Address for correspondence:

Viktoriia Kostenko

E-mail: vik.kostenko@pdmu.edu.ua

Анотація: Успішне отримання інформованої згоди на лікування залежить не лише від змісту документа, а й від чіткості, доступності та ефективності комунікації між лікарем і пацієнтом. Попри значну увагу до етичних і правових аспектів інформованої згоди, лінгвістичні чинники, що впливають на розуміння пацієнтами наданої інформації, залишаються недостатньо вивченими. Метою дослідження є аналіз використання внутрішньотекстових роз'яснень складних медичних термінів (code glosses) у формулярах інформованої згоди, що застосовуються у стоматологічних клініках США. У вибірку увійшли 50 документів. Аналіз здійснено на основі моделі метадискурсу Кена Гайленда із використанням інструменту Text Inspector для ідентифікації та класифікації типів роз'яснень і визначення їх функціонального навантаження в різних структурних розділах текстів. Результати показали, що найбільш поширеними є роз'яснення типу пояснення (explanation), що складають 45,9%, тоді як вказівка на наслідки (implication) та приклад (exemplification) становлять по 19,7% кожен. Більшість роз'яснень зафіксовано у розділах «Опис процедури» (30%) та «Діагноз» (28%), рідше – у розділах «Ризики, пов'язані з процедурою» (22%) та «Добровільна згода» (10%). Ці дані свідчать про нерівномірність лінгвістичної підтримки в текстах інформованої згоди, що потенційно ускладнює розуміння для пацієнтів з низьким рівнем медичної грамотності. Внутрішньотекстові роз'яснення відіграють важливу роль у зниженні когнітивного навантаження та забезпеченні доступності інформації, особливо для вразливих груп населення. Натомість деякі типи роз'яснень, зокрема аналогії або умовні формулювання, використовуються вкрай рідко, імовірно через юридичні чи стилістичні обмеження. Дослідження підтверджує, що лінгвістичні стратегії, спрямовані на роз'яснення спеціалізованої інформації, є не другорядними стилістичними засобами, а ключовими елементами пацієнт-орієнтованої комунікації. Рекомендується ширше впроваджувати зрозумілу, адаптовану до потреб пацієнта мову, а також мультимодальні інструменти для підвищення ефективності інформованої згоди.

Ключові слова: стоматологічна допомога, комунікація в охороні здоров'я, інформована згода, пацієнт-орієнтована допомога, навчання пацієнтів, термінологія.



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