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METADISCOURSE RESOURCES USED TO MANAGE DOCTOR-PATIENT INTERACTION IN INFORMED CONSENT TEMPLATES FOR DENTAL TREATMENT

МЕТАДИСКУРСИВНІ ЗАСОБИ КЕРУВАННЯ ВЗАЄМОДІЄЮ МІЖ ЛІКАРЕМ ТА ПАЦІЄНТОМ В ФОРМАХ ІНФОРМІРОВАНОЇ ЗГОДИ НА СТОМАТОЛОГІЧНЕ ЛІКУВАННЯ

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Metadiscourse plays an important role in organizing and producing persuasive speech, based on the norms and expectations of people involved. Metadiscourse is crucial in creating informed consent templates: metadiscourse devices help to establish relationships between the writer and the reader, to outline the socio-cultural context and the specific communicative situation. The purpose of this paper is to determine interactional resources used to manage textual interactions in informed consent template for dental treatment, to reveal their functions in the texts, and to examine how well the mentioned resources aid in achieving the text of being credible.

Metadiscourse analysis of the informed consent templates for dental treatment provides insights related to the social interaction between authors (dental care providers), readers (patients), socio-cultural context, and a specific communicative situation (the process of health decision-making). Investigating interactional metadiscourse resources, which are more directly and evidently related to interpersonality, has revealed the way collective authors (clinicians, legislators, healthcare managers) can engage and communicate with their audience.

The frequency of the five types of interactional markers (hedges, boosters, self-mentions, engagement, and attitude markers) and their functions in the informed consent templates are specific and considerable differ from those in academic or scientific texts. Self-mentioned markers and hedges have been found out as the most prevalent interactional resources used to establish more credible and reliable relations between dentists and patients and to build up the customer-oriented tone of the informed consent. The first person pronouns referring to both parties of informed consent emphasize the mutual involvement and responsibility for the further health outcomes. Hedges in the informed consent documents are mainly used to tone down risks, complications, and other potential problems associated with the dental treatment in order to mini-

mize the patients' overanxiety, i.e. to implement threat-minimizing strategy. Engagement markers and boosters play a less important role in building up relation with patients.

Key words: informed consent for dental treatment, text, doctor-patient interaction, metadiscourse, hedges, self-metnioned markers.

Метадискурс відіграє важливу роль у створенні переконливих та правильно організованих текстів, а його доцільне використання спирається на норми та очікування, усталені певною дискурсивною спільнотою в межах конкретної комунікативної ситуації. Мета запропонованої розвідки – виявити засоби інтеракціонального мета дискурсу, тобто маркери взаємодії, які вживаються в текстах поінформованої згоди на стоматологічне лікування для налагодження та підтримання кооперативних стосунків між лікарем та пацієнтом та визначити їхні комунікативні функції. Метадискурсивний аналіз форм інформованої згоди на стоматологічне, які використовуються в медичних установах США, дає глибше уявлення про соціальну взаємодію між стоматологами та їхніми пацієнтами у процесі ухвалення рішення погодитися на лікування чи відхилити його.

Частота вживання маркерів взаємодії та їхні комунікативні функції в текстах інформованої згоди значно відрізняються від таких в академічних чи наукових текстах. Виявлено, що найпоширенішими є маркери, що вказують на активні присутність пацієнта та лікаря в тексті, – це займенники першої особи однини та множини та відповідні присвійні займенники. Стосуючись обох сторін інформованої згоди, ці займенники підкреслюють взаємну участь і відповідальність за наслідки ухваленого рішення. Засоби хеджування у формах інформованої згоди є другими за частотою вживання і здебільшого використовуються для вираження ймовірнісного характеру потенційних ризиків, ускладнень чи інших проблем, пов'язаних із стоматологічним лікуванням. У такий спосіб автори досягають мінімізації надмірного занепокоєння з боку пацієнтів, тобто втілюють стратегію мінімізації загроз. Маркери-підсилювачі та маркери залучення відіграють менш важливу роль у процесі отримання поінформованої згоди.

Ключові слова: інформована згода на стоматологічне лікування, текст, взаємодія лікар-пацієнт, метадискурс, хеджування, самовиявлені маркери.

Background. At present many medical and healthcare-related genres have been extensively explored, however, there are a few reports of Ukrainian linguists (R. Povorozniuk [1], V. Kostenko et al [2]) and foreign researchers (M. Edmunds et al. [3], T. E. Emanuel [4], Isaacs et al. [5], R. Kadam [6]) elucidating the rhetoric and linguistic characteristics of the informed consent for treatment and research participations as well as issues on its accessibility and understandability for average audiences that is of a great significance for clinical practice. Informed consents are formal written medical, legal and administrative documents of the doctor–patient interaction that match a clinical relationship based on the ethics of autonomy [7, p. 295]. The completed and signed informed consent form ensures a communication process between healthcare provider and patient about treatment procedures and protects patients from assault and battery, on the one hands, and healthcare providers against the claims of dissatisfied patients, on the other. Informed consent is a genre in which awareness of the audience is critical in capturing rhetorical objectives. Though regulations on informed consent emphasize that documents should be brief, readable, and prioritize patients' understanding, over time, these documents have become longer and more complex [4, p. 1].

Metadiscourse is an interesting and promising field of inquiry that has caught the attention of many scientists from different disciplines, especially in research about language. Metadiscourse, language tools, which reveal the writers' awareness of the readers' need for elaboration, clarification, and interaction, is crucial in creating informed consent templates: metadiscourse devices help to establish relationships between the speaker and the writer, to outline the socio-cultural context and the specific communicative situation.

Z. Harris introduced the term "metadiscourse" in order to better express the pragmatic relationship between writer and reader several decades ago [8, p. 15–l7]. A. Crismore defined metadiscourse as "the linguistic material intended to help the reader or listener organize and interpret information in texts" [9, p. 43], but does not add any information to the propositional content. The use of metadiscourse in writing and speaking embodies the concept that communication is more than just the exchange of information, facts, and figures [10, p. 21–23]. Thus, in a broad sense, metadiscourse is a functional category that encompasses the variety of interpersonal and cohesive linguistic elements, which authors use to relate text to the socio-cultural context, and the specific communicative situation.

Medical texts are often hard for lay people to be understood: an attempt to achieve regulatory compliance usually sees the consent document laden with complex scientific terminologies and technical jargon [5; 6] and complicated technical information to the general public who usually have insufficient or no background knowledge of health-related issues at all. Informed consent forms are known as elaborated for an average patient, who is presupposed to have an 8th grade reading level according to International standard classification of education [11], however, most informed consent templates are written at a 10th grade reading level or higher [4, p.1]. Using metadiscourse effectively, i.e. to consider the needs of the

target audience, to organize the content accordingly and to guide readers through the text, is crucial for successful doctor / patient communication.

The **purpose** of this paper is to determine interactional resources used to manage textual interactions in informed consent template for dental treatment, to reveal their functions in the texts, and to examine how well the mentioned resources aid in achieving the text of being credible.

Methodology. This descriptive and exploratory study is concerned with explaining phenomena as they occur naturally in the texts. The research was conducted with a set of 25 original informed consent (IC) templates for dental treatment used in the USA healthcare settings authorized to render oral and dental services (New York City Metropolitan Hospital Center, Alliance for Dental Care), or provided by medical insurance companies (Dentists Benefits Insurance Company (DBIC), MedPro Group). The templates were searched for using Google search engine and downloaded from internet sources Open Dental Software, American Dental Association dental records reference, Delta Dental Incorporation.

The identification and categorization of the metadiscourse in the texts of informed consent (IC) is based on the Hyland's metadiscourse model [10, p. 49]. The IC texts were scrutinized for detecting interactional markers and their occurrence rate, and then analyzing them in terms of meaning and function. For the same purposes, the IC texts were processed with *Text inspector*, a professional high-powered web-based text analysis tool, which provides reliable research-based information on the complexity of a text, the lexical composition as well as statistics on word frequency and character count, etc. This tool can recognize fourteen categories of metadiscourse markers and based on the types identified by S. Bax et al. [12], whose classification, in turn, built upon the Hyland's taxonomy [10, p.48–50]. Findings on the metadiscourse markers per text are presented as both a table and a graph (splited into tokens and types) as given in the Photo1.

Results and Discussion. The findings obtained demonstrate that the average percentage of metadicourse markers per document makes up 12.72%; the interactional markers, which deal with the expression of the writers' opinion and aim at getting readers involved in the text, therefore, are more related to Halliday's interpersonal metafunction [13, p.180], constitute 5.92%, thus somewhat falling behind the interactive markers, which is 6.8%. The interactional markers referring to the writer's "explicit interventions to comment on and evaluate material" [14, p. 168] split into five subcategories: hedges, boosters, self-mentions, engagement, and attitude markers. Their occurrence in the IC texts is as follows: most of all interactional metadiscourse resources are represented by self-mentioned markers, constituting 57%; hedges are approximately two and a half times less prevalent and make up 24%; boost-
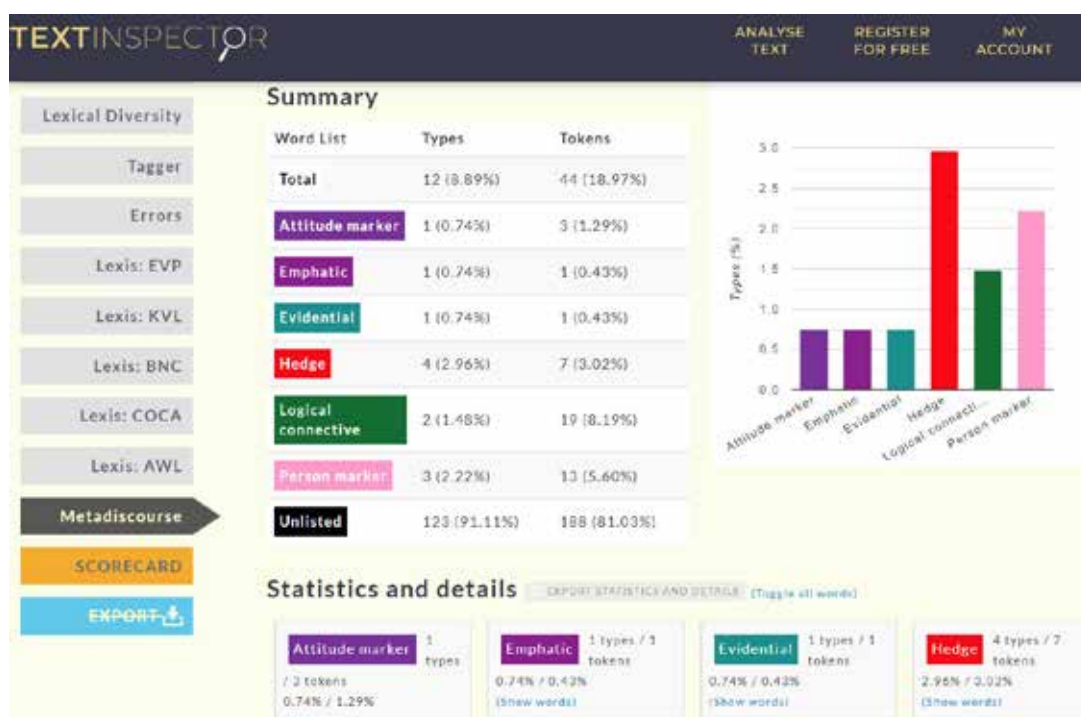

Photo 1. Metadiscourse analysis data obtained by applying Text inspector web tool

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ers account 13%, and engagement markers constitute the smallest share of 5%; the part of attitude markers of about 1% is negligible.

Self-mentioned markers (*we, our, I, my, your*) have been found as the most commonly used out of these subcategories:

I understand that oral surgery and/or dental extractions include inherent risks such as, but not limited to the following <…> [1].

My dentist (s) has fully explained to me the condition requiring treatment and the nature, purpose, risk and benefits of the procedure (s) [2].

After a careful oral examination, radiographic evaluation and study of my dental condition, my doctor has advised me that I would benefit from crown lengthening surgery [3].

Pronouns generally tell the readers where authors focus their attention. The plentiful use of the first person "*I*" is the most commonly-used device for self-representation as well as the possessive pronoun "*My*" serves as a self-focus marker. The first person pronouns demonstrate that the patient acts voluntarily as a reasonably informed and responsible participant in making health decision, as opposed to paternalistic model of physician-patient communication. The examples given above emphasize the patient's accepting responsibility for the consequences of the health decision and promoting a partnership between patient and clinician. IC documents also accentuate the direct commitment and responsibility of dental care providers using first-person narrative, for example:

We will be extracting teeth #(s) _____ [4].

We have recommended having the tooth treated by endodontic therapy, which consists of removal of the material within the root canal of the tooth and the replacement of that material by inert filler [5].

I certify that I have explained to the patient and/or the patient's legal representative the nature, purpose, benefits, known risks, complications, and alternatives to the proposed procedure [6].

Thus, the language of IC documents tends to stress a point of shared decision making and shared responsibility for the further health outcomes.

Hedges are devices which indicate the writer's decision to recognize alternative voices and viewpoints and so withhold complete commitment to a proposition. Hedges are also used to distinguish facts from opinion, or "honesty, modesty and proper caution" [15, p. 174]; hedges in scientific texts are commonly used to increase the reliability and objectivity of the information given [16, p. 112–115], or to facilitate other possible perceptions from readers. Hedges in the IC documents are mainly used to

tone down risks, complications and other potential problems associated with the dental procedures and interventions to minimize the patients' overanxiety, i.e. to implement threat-minimizing strategy. The most common hedging devices in the IC texts are represented by modals (*may, might, can, could).* The following are the examples of hedges used in the IC texts:

Possible involvement of the sinus during removal of upper molars, which may require additional treatment or surgical repair at a later date [3].

I have been informed about possible complications and risks [1].

I have been informed and fully understand that there are certain inherent and potential risks associated with root canal treatment [7].

Dentistry, as in medicine, is not an exact science and therefore no guarantee can be made or implied as to the success of the root canal treatment and/or surgery [5].

The balanced use of hedging devices is invariably essential not only for academic writing [17, p. 251], but for patients' health-related documents because excessive use of hedging devices may create an adverse effect on the credibility of the claim, hence, on the authors behind the informed consent. When the author does not want to take full responsibility for the truth of his/her utterances, he / she can employ hedging modifiers can to suggest a hypothetical possibility, and could to make the suggestion even more tentative [18, p. 216–220; 19, p. 111–113].

Engagement markers explicitly address readers, either to focus their attention or include them as discourse participants. Engagement markers in the IC texts are interpersonal elements used to build a closer relationship with the patients and to develop a consistent practice of involving patients in decisions. Engagement markers rarely occur through IC templates and commonly are in the forms of second person pronouns or imperatives:

Your doctor has recommended the Invisalign system for your orthodontic treatment [8].

By your signature below, you authorize the pathologist to use his or her discretion in disposition or use of any member, organ or tissue removed from your person during the operation or procedure set forth above [6].

If you have not had all of your questions answered to your satisfaction, do not sign this form until you have [2].

Some swelling is normal, but if severe, you should notify us [9].

Boosters, also known as intensifiers or sureness markers, "express certainty and emphasize the force

of propositions" [20, p. 134]. When authors wish to strengthen the force and persuasiveness of their claims, arguments, and propositions, using boosters is a preferred practical way. M. Khedri and K. Kritsis point out that boosters are used for avoiding different opinions or possible objections [21, p. 58]; Gholami et al suggest that writers utilize boosters to show their certainty instead of doubt so that there will be no conflicting arguments [22, p. 22].

By the occurrence rate per IC document, boosters rank the fourth position and can be represented by emphatic "*do*" and lexemes *even after, entire, all,* for example:

*If you **do** change your mind and no longer wish to have an implant, it is important that you inform us immediately [6].*

*You have the right to change your mind at any time, **even after** you have given consent and the procedure has started (as long as it is safe and practical to do so). [10].*

*I give authorization to the members of medical staff and give **entire** permission to them for carrying out any sort of the treatment or dental procedure [2].*

The analysis of selected IC texts has demonstrated that boosters are mainly used to reinforce warnings and precautions, or to restrict the negotiating space available to the readers. Though hedges and boosters are perceived as "two sides of the same coin" [23, p. 2797] when expressing uncertainty and certainty about a proposition, boosters are almost three times less frequent in the IC texts compared with hedges: this can be explained by the fact that any dental treatment or procedure is associated with the risk of adverse events, and the dentists face a difficult task: to reveal sufficient and trustful information about the treatment course, possible complications, etc. to the patients without frightening them off.

Attitude markers, which usually show significance, agreement, disagreement, surprise, etc., that is express authors' attitude to proposition or convey their evaluation, have not been fount in any significant numbers in the IC templates for dental treatment.

Conclusion. Metadiscourse analysis of the informed consent templates for dental treatment provides insights related to the social interaction between authors (dental care providers), readers (patients), socio-cultural context, and a specific communicative situation (the process of health decision-making). Investigating interactional metadiscourse resources, which are more directly and evidently related to interpersonality, has revealed the way collective authors (clinicians, legislators, healthcare managers) can engage and communicate with their audience.

The frequency of the five types of interactional markers (hedges, boosters, self-mentions, engagement, and attitude markers) and their functions in the informed consent templates are specific and considerable differ from those in academic or scientific texts. Self-mentioned markers and hedges have been found out as the most prevalent interactional resources used to establish more credible and reliable relations between dentists and patients and to build up the customer-oriented tone of the informed consent. The first person pronouns referring to both parties of informed consent emphasize the mutual involvement and responsibility for the further health outcomes. Hedges in the informed consent documents are mainly used to tone down risks, complications, and other potential problems associated with the dental treatment in order to minimize the patients' overanxiety, i.e. to implement threat-minimizing strategy.

The results obtained can have practical implications for healthcare settings in elaborating more patient-friendly documents and for medical / dental ESP classes by providing deeper understanding of the professional discourse.

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