PROBLEM-ORIENTED MEDICAL RECORD AS A CHALLENGE FOR NARRATOLOGICAL ANALYSIS

[1]Lysanets Yu., [1]Bieliaieva O., [1]Znamenska I., [1]Nikolaieva N., [1]Efendiieva S., [2]Hutsol M.

[1]Ukrainian Medical Stomatological Academy, Department of Foreign Languages with Latin and Medical Terminology, Poltava, Ukraine

[2]Ivano-Frankivsk National Medical University, Department of Linguistics, Ivano-Frankivsk, Ukraine

Introduction. A Problem Oriented Medical Record (POMR) is an effective method of registering and subsequent assessing of information about the patient's health status. The POMR was suggested by Dr. Larry Weed in 1968 and is widely used in clinical practice nowadays. The aim of this research is to examine the narrative arrangement of POMRs as one of the central genres in medical written discourse. At present, the structure of POMR in terms of narratological analysis constitutes a relevant research gap and therefore needs careful examination. The paper will analyze the narrative strategies within this context, the types of narrators, their communicative intentions towards the narratee, the peculiarities of focalization, and the interaction of narrative levels. The study of narrative framework in the genres of English medical discourse will ensure the development of professional ad terminological competence in future healthcare, which is one of the priority tasks of higher medical education [4; 16]

Materials and methods. The narrative (from the Latin *narrare* – "to tell") is a linear presentation of related events and facts. In a broad sense, the concept of narrative is used in terms of any oral or written form of discourse. Narratology as a modern and relevant branch of literary studies examines the specific features of narratives, the hierarchy of narrative levels, and the mechanisms of information transfer from the narrator (the presenter of the story) to the narratee (the recipient). This branch of study was substantiated in Roland Barthes's *Introduction to the Structural Analysis of Narratives* (1966); Tzvetan Todorov's *Grammaire du Décaméron* (1969) provided it with terminological apparatus; and finally the conceptual arrangement of narratology was accomplished in Gérard Genette's *Figures I-III* (1967-1970).

At the present stage of development, narratology demonstrates an interdisciplinary tendency, i.e., modern narratologists examine the non-literary fragments of discourse [8]. Narratives are the universal mechanisms of arrangement and the regulation of human experience. Narratives permeate everyday life: "We dream in narrative, daydream in narrative, remember, anticipate, hope, despair, believe, doubt, plan, revise, criticise, construct, gossip, learn, hate and love by narrative" [10]. In recent decades, researchers have begun to consider the epistemological, emotional and evaluative dimensions of medical discourse as a narrative phenomenon [1; 4; 12].

Our research is largely based on methodological instruments developed by Gérard Genette, who differentiates between the two main narrative modes: "one with the narrator absent from the story he tells ... and the other with the narrator present as a character in the story he tells" [9]. The first is defined as heterodiegetic and the second as homodiegetic narrator. The heterodiegetic mode is grammatically implemented in the third-person account of events whereas homodiegetic – in the first-person narration. Another important narratological concept used in this research is focalization – the view-point from which the narrated world is perceived. There are three types of focalization: internal (information is provided through the consciousness of a character, referred to as "focalizer"), external (the narrator provides only observable information, "the narrative is focused on a character, not through him") [9], and transient (the deliberate combination of narratives from different focalizers). Further, Genette distinguishes between the intradiegetic level (the level of the story itself, "any event a narrative recounts"), and the extradiegetic level, i.e., the level of telling a story, "the narrating act producing this narrative" [9].

Medical discourse as an object of narratological analysis offers a range of narratives generated in the context of the physician's clinical practice. In terms of the narratological approach, attention is focused on the two basic forms of discourse:

1) the patient's account of illness, or the so-called "pathography" (S. Freud), i.e., "autobiographical account" of the disease onset, past illnesses, causes of referral to the doctor, incidents, lifestyle problems and so on [11]. The patient's description of their illness is narrated through the first-person narration.

2) the physician's account (third-person), represented by narratives of treatment, examination, patient's assessment, etc. In this regard, the concept of the doctor's "narrative competence" becomes relevant. It implies "the capacity to recognize, absorb, metabolize, interpret and be moved by stories of illness" [7], as well as the ability to influence the narratives of another person.

POMR, as one of the most important methods of medical writing, provides a standard set of data: information collected during patient's interview (the main complaint, history of present illness, history of past illnesses, surgical history, allergies, family history, social history); information from family members; review of symptoms; physical examination of the patient; results of laboratory tests; assessment of the patient's status and development of the treatment plan. As one can easily observe, POMR contains both physician's and patient's narratives, and therefore this method has been selected as the focus of the research. In particular, for narratological analysis we used the POMR samples from training materials from the University of North Carolina School of Medicine (www.snjourney.com), SNjourney (Online Community of Nursing Students: www.snjourney.com) and guidelines for writing POMR by Lois Brenneman (2001).

Results. The structure of POMR is relatively standard in different health care settings, with clinical data arranged into four sections (often abbreviated as "SOAP"): "Subjective Observation", "Objective Observation", "Assessment" and "Plan".

In "Subjective Observation", the physician is represented by hetero-extradiegetic narrator (third-person) who

gives an account of the patient's condition. The physician's aim is to carefully record the patient's subjective feelings: "*She* is worried she may have poison ivy"; "*She* is worried she has pneumonia" [19]; "*She* is concerned that there is something seriously wrong" [18]. In this part of POMR, the patient's "voice" is also directly incorporated into the discourse. The patient narrates what forced him to see a doctor ("the main complaint"), and gives an account of the sequence of events and personal experiences associated with the disease. The homo-intradiegetic narrator is introduced by inclusion of the patient's quotations:

- "She began to experience severe pain "*like being stung by a bee*" [17]; "Patient reports that he had a cardiac cath at NYU Medical Center in 1994 after which "*they told me that 3 of my vessels were clogged*" [6];
- "Sexually active, new partner beginning 4 months ago. He told her the relationship is monogamous: she "*hopes it is*". Previous sexual partner over 1 year ago. New partner irregularly uses condoms; "*He gets mad when I ask him to and says I don't trust him*". Did not press the issue because "*I am afraid of losing him*". No other contraception" [6].

The patient's narrative of illness optimizes the communication. It helps the doctor to understand the problem, to determine how and why a person has fallen ill, and then to select the appropriate strategy and tactics of treatment. Where a patient is physically incapable of direct communication, the so called hetero-anamnestic narrative of another person is possible. Family members are also quoted where relevant: "Her husband states that she has "*always snored*" quite loudly" [19]. As a result, the discourse risks becoming "contaminated" with narratives from different people affected by and connected to patient's condition.

Thus, this section is composed of interchangeable modes of heterodiegetic and homodiegetic narration which complement each other and form a coherent scenario of the patient's pathography. By quoting the information from other people, the physician's heterodiegetic narration is characterized as transient internal focalization which constructs the story through the prism of patient, family members or caregivers and thus creates a narrative polyphony. The technique of transient focalization develops the action from different points of view and thus the physician is able to see the broad picture of the problem. Further on, the doctor asks a series of questions designed to study the general health status of the patient (surgical history, allergies, etc.). The interview is completed with the patient's examination, during which the physician focuses on specific body systems that correlate with the symptoms.

"Objective Observation" includes the results of laboratory tests, findings of physical examinations, measurements and vital signs of patient's body, such as heart beat, pulse, temperature, etc. Objective Observation is characterized by narrative conciseness by means of paratactic syntax (compound sentences with no conjunctions) and extensive use of medical abbreviations. The omniscient narrator is eliminated; instead, the cinematic sequences of clinical findings and laboratory tests are juxtaposed. The narrator adopts the position of spectator (external focalization) who registers the events and records the empirical data (i.e., the symptoms that can be measured and observed) in a neutral, abrupt and "telegraphic" manner. The physician documents such objective data as "raised weight index (WI), arterial hypertension, increased concentration of triglycerides in blood serum, of glucose, of HbAlc level and S-peptide, and also high level of endotelin (1-38) and CD32+CD40+circulating particles of endothelium" [13]. Thus, the narrator shifts to the periphery of the diegesis beyond the narrative framework, and becomes unidentified and invisible. The situation of external focalization provides the physician's impartial glance from the outside. Whilst the narrator's purpose in the first section was to "immerse" themselves in the patient's problem, the second unit is aimed at "estrangement" in order to perceive it from another perspective.

It is necessary to bear in mind that POMRs are usually addressed to other physicians. It is assumed that the narratee (i.e., the recipient of the discourse) is also versed in medicine. Consequently, the narrative structure of the "Objective Observation" section allows the extensive use of abbreviations and elliptical (partial) sentences. This peculiarity is due to the communicative purpose of this method: the author's primary objective is to transfer the maximum amount of clinical information using the minimum number of linguistic tools. For instance: "CV: JVP is 6cm above the right atrium, PM1 non-displaced, RRR, no murmurs, normal SI" [19]; "Neck no JVD, Lungs clear. Abd Bowel sounds present, mild RLQ tenderness, less than yesterday" [18]; "Heart: S1>S2 at apex, RRR without murmurs, clicks or gallops, pulses 2+/equal bilaterally" [6].

The "Assessment" section usually contains the narrator's differential diagnosis and clinical reasoning. All possible causes of the disorder are carefully considered and weighed. As a rule, the narrator does not use abbreviations in this section. Instead of this, extensive reasoning is provided: "Patient is a 37 year old man on post-operative day 2 for laparoscopic appendectomy" [17]. This section is dominated by the "dubious" narrator who does not exclude any possible etiology of the condition and sets forth all probable causes, from most to the least likely:

- "Recent onset of cough. *Most likely* represents bronchitis complicated by bronchospasm given acute onset, fever and exam findings of diffuse wheezes. CXR and exam confirm no bacterial pneumonia, though a viral or atypical pneumonia *is still possible*" [19];
- "A new onset painful rash in a dermatomal distribution. This is *most likely* secondary to herpes zoster because of the location, distribution and associated pain. *A less likely possibility* is contact dermatitis, given her recent gardening. She *may also have* a cellulitis, but the lack of temperature doesn't support this" [19].

Thus, this section is characterized by a special type of "uncertain" narrator does not make a unified conclusion as to the patient's condition.

The "Plan" section switches to the imperative mode of narration which implies clear directions:

- "*Treat* with albuterol inhaler 2 puffs QID"; "#1 *Check* TSH to rule out hypothyroidism. #2 *Check* CBC to rule out

anemia. #3 *Check* K to rule out hypokalemia" [19];
- "*Continue* to monitor labs" [18].

It is necessary to point out that this section often contains Latin terms and terminological collocations, such as *QID* in the above-mentioned sample ("quater in die": "four times a day"). The use of Latin terminological collocations contributes to the conciseness and brevity of POMR [14; 15]. This also enables the doctors to transfer their messages to colleagues within the shortest possible time [2; 3; 5].

Since the previous section provides multiple versions of the patient's condition, the "Plan" part supplies each of these variants with a specific plan of actions. The narrator's instructions are often conditional:
- "Return to clinic in 3 weeks for reevaluation. To call sooner *if there are problems in the interim*" [6];
- "*If the above are unremarkable*, consider sleep study to rule out sleep apnea"; "Mary should return to clinic *if the pain becomes more severe* or *if she develops warm, redness or a fever*" [19].

Conclusions. The narrative arrangement of POMR is characterized by a specific type of narration in each particular section. The "Subjective Observation" section demonstrates the combination of the physician's hetero-extradiegetic narration and homo-intradiegetic stories from patients, family members, or caregivers. The omniscient heterodiegetic (third-person) narrator with transient internal focalization risks the contamination of discourse with homodiegetic (first-person) inclusions thus providing the kaleidoscopic change of focalizers. Transient internal focalization provides insights into the consciousness of each person involved which renders it possible to "grasp" the clinical problem from all directions. The estranged heterodiegetic narrator, with external focalization in the "Objective Observation" part, registers the events and empirical data (such as results of laboratory tests, findings of physical examinations, etc.) in a neutral manner. The "Assessment" section demonstrates the "uncertain" type of narrator with fluctuating viewpoint who conducts differential diagnostics, shares all possible etiologies and eventually does not decide upon a single variant. The "Plan" section is characterized by the imperative narrator who provides instructions for treatment in terms of each possible etiology and stimulates the narratee (i.e., another physician) to undertake certain actions.

The major strategy of POMR as a complex of verbal practices is to "intertwine" the events, scattered in time and space, into one coherent narrative to ensure the effective communication between physicians and successful treatment of patients. Within the structure of POMR, the patient's pathography presents a verbatim report of experiences associated with the disease and the process of treatment. On the other hand, the process of structuring the information on the patient's condition forms the epistemological basis of doctor's practice (i.e., perception and comprehension of a medical case). For future physicians, it is highly important to develop the "narrative competence", that is, the ability to accurately record the findings of physical examination and eventually arrange the patient's "pathography" in a coherent story. Acquiring the narrative literacy skills in writing POMRs enables the effective communication of clinical data between doctors, and therefore should be an integral element of training future medical professionals. Therefore, in the process of training future doctors, the analysis of the basic mechanisms of writing POMRs should be an integral part of the curricula in English for Specific Purposes at universities.

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SUMMARY

[1]Lysanets Yu., [1]Bieliaieva O., [1]Znamenska I., [1]Nikolaieva N., [1]Efendiieva S., [2]Hutsol M.

[1]Ukrainian Medical Stomatological Academy, Department of Foreign Languages with Latin and Medical Terminology, Poltava, Ukraine

[2]Ivano-Frankivsk National Medical University, Department of Linguistics, Ivano-Frankivsk, Ukraine

The paper examines the narrative arrangement of the problem-oriented medical record (POMR) as an effective method of registering and assessing clinical data. The aim of the research is to examine the types of narrators and focalization, as well as the hierarchy and interaction of narrative levels in the analyzed discourse. The research has demonstrated the presence of several types of narrators within the analyzed discourse: (1) the omniscient hetero-extradiegetic narrator with transient internal focalization (the third-person narration, represented by the physician) and (2) homo-intradiegetic narration (patient's first-person narration) in the "Subjective Observation" section; (3) the "estranged" heterodiegetic narrator with external focalization (the "Objective Observation" part); (4) the "uncertain" type of narrator (the "Assessment" part); (5) and the imperative mode of narration (the "Plan" section). Each section of POMR is characterized by a specific type of narration, and each of them aims to "intertwine" the events, scattered in time and space, into one coherent narrative to ensure the effective communication between physicians and successful treatment of patients. It is highly important for future physicians to develop narrative competence and master the basic mechanisms of producing an effective POMR, in order to be able to accurately document the encounters with patients, elicit the relevant details from case histories, and select the appropriate strategy of treatment. Therefore, in the process of training future doctors, the analysis of the basic mechanisms of writing POMRs should be an integral part of the curricula in English for Specific Purposes at universities.

Keywords: medical discourse, problem-oriented medical record, narrator, narratee, narrative levels, focalization.

РЕЗЮМЕ

ПРОБЛЕМНО-ОРИЕНТИРОВАННЫЙ МЕТОД ВЕДЕНИЯ МЕДИЦИНСКОЙ ДОКУМЕНТАЦИИ КАК ОБЪЕКТ НАРРАТОЛОГИЧЕСКОГО АНАЛИЗА

[1]Лисанец Ю. В., [1]Беляева Е. Н., [1]Знаменская И. В., [1]Николаева Н. Н., [1]Эфендиева С. Н., [2]Гуцол М. И.

[1]Украинская медицинская стоматологическая академия, кафедра иностранных языков с латинским языком и медицинской терминологией, Полтава, Украина

[2]Ивано-Франковский национальный медицинский университет, кафедра языкознания, Ивано-Франковск, Украина

В статье исследуются повествовательные механизмы современного метода регистрации и оценки клинических данных − проблемно-ориентированной медицинской документации (ПОМД). Целью работы является изучение основных типов рассказчиков, особенностей фокализации, взаимодействия повествовательных уровней в анализируемом дискурсе. Исследование основывается на методологическом инструментарии, разработанном современным французским нарратологом Жераром Женеттом. Анализ ПОМД показал наличие нескольких типов рассказчиков в анализируемом дискурсе: (1) рассказчик от третьего лица (гетеродиегетическое повествование врача с переменной внутренней фокализацией); (2) рассказчик от первого лица (гомодиегетическое повествование пациента) в разделе "Субъективное наблюдение"; (3) "отстранённый" гетеродиегетический рассказчик с внешней фокализацией (раздел "Объективное наблюдение"); (4) "колеблющийся" тип рассказчика (раздел "Оценка данных"), (5) а также повелительный стиль изложения (раздел "План"). Каждая секция ПОМД характеризуется определенным типом повествовательной стратегии, и каждая из них направлена на "сплетение" событий, рассеянных во времени и пространстве, в последовательную историю. Развитие так называемой "повествовательной компетентности" крайне важно для будущих врачей, и поэтому изучение повествовательных механизмов ПОМД должно быть неотъемлемым элементом подготовки будущих медицинских работников, поскольку этот метод обработки информации эффективно структурирует клинические данные, обеспечивает оперативную коммуникацию между врачами, и, таким образом, способствует успешному лечению пациентов.

Ключевые слова: медицинский дискурс, проблемно-ориентированная медицинская документация, рассказчик, повествовательные уровни.