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Interaction: speech therapist – patient with a moderate stage of Alzheimer's disease

SUMMARY

This article discusses the problems of interaction (defined as a basic unit of social communication – Domagała 2015b) in the conditions of a moderate stage of dementia. The attention has been focused on problems with keeping interpersonal relations adequate in the examination situation in respect of social skills. The study was conducted on the empirical material gathered under the research project "Narrative and Its Disorders in Alzheimer's Dementia. *The Scale of Narrative Skills* in Alzheimer's Dementia" (project manager: Dr Aneta Domagała; 39th Ministry of Science and Higher Education competition of research projects). A total of 60 patients with a moderate stage of Alzheimer's dementia were studied.

In the studied population, about 58% of subjects were able to function correctly in contact with the interlocutor. It should be noted that there were persons (ca. 17%) who were able to form a (strongly) positively marked relationship, and were characterized by high skills of cooperation with another person in a diagnostic situation. About 42% of the subjects showed difficulties in the relationship with the interlocutor. The evaluation of basic dimensions of interaction occurring in the examination condition is fundamental to determining the linguistic abilities of a patient with dementia; the subject's utterances, analyzed and interpreted by a speech therapist, are situationally conditioned (here: according to how the patient perceives a given communication situation).

Keywords: diagnosis, linguistic behaviors, interaction, Alzheimer's dementia

INTRODUCTION

This article discusses the problems of interaction (defined as a basic unit of social communication – Domagała 2015b) in the conditions of a moderate stage of dementia.

The ability to communicate with another person, to maintain the contact, and to stifle it within the existing system of social roles (as S. Grabias puts it – 1994a; 2001a) is the basic dimension of interaction in diagnosis and therapy and also in every other communication situation with the participation of a subject (e.g. professional caregiver/patient in everyday communication in a care center). In dementia, the basic issue is to identify a communication situation – social roles, who is talking, who is s/he talking to, in what situation, and why (which should be highlighted as the ability of a desirable situational model to become activated, which corresponds to a general knowledge on various communication situations or contexts in which the discourse takes place – as E. Osiejuk /1994/ reports – in the sphere of cognitive neuropsychology in reference to basic levels of utterance structuring).

It should be emphasized that the patient's behavior in an examination situation may be determined by various cognitive or non-cognitive deficits**.** As regards the cognitive sphere, at the mild stage of dementia there occurs intensification of linguistic disorders (a survey of studies on speech disorders – H. Marczewska 1994; A. Domagała 2007, 2015), but also memory disorders, allo- and autopsychic orientation disorders, and disorders of attention and visual-spatial functions (Pąchalska et al. 2004; Herzyk, Jodzio 2008; Olszewski 2008; Grossberg, Kamat 2011, et al.). As regards the non-cognitive sphere, the principal dementia symptoms include mental disorders and behavior disorders (Sobów 2010; Grossberg, Kamat 2011, Kłoszewska, Magierski 2004, et al.): there are no criteria that would define symptoms attributed to Alzheimer's disease (Schneider, Dagerman 2004).

The evaluation of basic dimensions of interaction occurring in the examination condition is fundamental to determining the linguistic abilities of a patient with dementia; the subject's utterances, analyzed and interpreted by a speech therapist, are situationally conditioned (here: according to how the patient perceives a given communication situation).

The results of the studies, which are presented in this article, complement the description of phenomena included in the monograph that presents basic results of empirical studies in the population of people with different stages of dementia. (Domagała 2015b). The attention has been focused on problems with keeping interpersonal relations adequate in the examination situation in respect of social skills.

MATERIAL AND METHODS

The study was conducted on the empirical material gathered under the research project "Narrative and Its Disorders in Alzheimer's Dementia. *The Scale of Narrative Skills* in Alzheimer's Dementia" (project manager: Dr Aneta

Domagała; 39th Ministry of Science and Higher Education competition of research projects).

In the course of examination, narrative utterances were principally elicited using thematically designed auxiliary materials (photographs, illustrations), having in mind the basic forms of utterances that they generated. These utterances were then analyzed in many respects. At the same time, a significant element of the overall assessment of the subject's linguistic behaviors, made with the use of the author's own "Scale of Narrative Skills", was the functioning of the patient during interaction with the speech therapist.

The "Scale of Narrative Skills" consists of three principal parts:

I. Assessment of narrative skills, which is made based on empirical material obtained during the examination, on statements elicited by the examiner in individual contact with the subject, recorded and transcribed.

II. Self-assessment of own linguistic behavior made by the subject.

III. Assessment of the subject's behavior in an examination situation.

In part III, the assessment of the subject's behavior is based on observation carried out during the examination and oriented, in accordance with the prepared "Observation Card", towards the functioning of the patient in the subject-examiner relationship, in order to identify possible problems with maintenance of interpersonal relationship appropriate in an examination situation.

Empirical studies were carried out at the specialist institutions providing help to persons with Alzheimer's disease:

– Wrocław Medical University's Research and Teaching Center for Dementia Diseases located in Ścinawa – Department of Psychogeriatrics;

– the Prof. M. Kaczyński Neuropsychiatric Hospital in Lublin – Psychogeriatrics Department;

– Rev. Jerzy Popiełuszko Nursing Home in Toruń – Daycare Department;

– Residential Medical Care Facility for Alzheimer Patients in Koprzywnica;

– Nursing Home for Alzheimer Patients in Górno (John Paul II Independent Public Complex of Healthcare Facilities);

– Alzheimer Center in Warsaw – Daycare Department and Nursing Home;

– Community Home of Mutual Aid for the Wola District in Warsaw – Community Center for Patients with Alzheimer's Dementia Syndrome;

– Community Home of Mutual Aid for patients with Alzheimer's Dementia Syndrome in Kraków (Małopolska Foundation for Assistance to Alzheimer's Disease Patients);

– Daycare and Therapy Center for Alzheimer's Disease Patients in Płock;

– Community Home of Mutual Aid for Alzheimer's Disease Patients in Łódź (Łódź Alzheimer Society);

– Support Center for Persons with Alzheimer's Disease in Kielce;

– Type-C Community Home of Mutual Aid (in Krzemionkowska St.) in Kielce;

– Community Nursing Homein Poznan (Wielkopolskie Alzheimer Association);

– Community Home of Mutual Aid for Alzheimer's Disease Patients and Nursing Home "Kalina" in Lublin;

– Type-C Community Home of Mutual Aid for Alzheimer's Disease Patients (in Lwowska St.) in Lublin;

– Community Home of Mutual Aid for Alzheimer's Disease Patients "Mefazja" and "Memory" (Lublin Alzheimer Association) in Lublin.[1]

Empirical studies were conducted by me in person, each time in an individual contact with the patient studied.

The empirical material concerning the assessment of behawior, used in this article, consisted of 60 "Observation Cards", which were completed each time after individual examination, and additionally, of recordings of this part of examination together with transcriptions of the subject's utterances. A total of 60 patients with a moderate stage of Alzheimer's dementia were studied: 30 women (group code: UK) and 30 men (UM – these codes are used in the article to describe the exemplificative material, adding the serial number of the patient investigated). The mean age of the studied population was 76 years and 8 months.

The analyses of empirical material were conducted in qualitative and quantitative terms pursuant to the directives included in part III of "The Scale of Narrative Skills" [*Skala sprawnosci narracyjnej*] which refers to the evaluation of behavior.

RESULTS

1. The functioning of the patient in the subject-examiner relationship. A general quantitative and qualitative assessment

The assessment of the functioning in the subject/examiner relationship was carried out with the distinction of the following categories:

0 – *generally without reservations*

Behaviors consistent with the type of contact that corresponded to the examination situation (official, temporary contact) – the patient is able to function in the role of a subject, to maintain contact and preserve a proper relationship with the

[1] I would like to express my cordial gratitude to the specialists in those centers – for their help and kind attitude which I felt while conducting these studies – and to the patients and their caregivers for taking part in the studies.

examiner, to cooperate in an examination situation (lack of inappropriate behaviors) were subsumed under this category.

Additional with the categorization

0a – *official contact, neutral*

0b – *official contact, positively marked*

Category 0b distinguishes patients who are able to develop a positively marked relationship: they willingly take part in the examination, are glad that they are the center of interest, during the examination they show affection, are kind and sometimes they keep a warm and hospitable relationship. Direct commentaries on the participation in the examination and remarks directed to the examiner, the way they address the interlocutor, polite forms of address, vocal behaviors are the criteria. In such cases the examination is carried out in a unique, friendly atmosphere – the existing communication situation is satisfying for the patients: unasked, they pay attention to the quality of interpersonal relationship (in a given system of social roles – they point, for example, to similarities of their previous professional duties, e.g. a teacher, a doctor).

People evaluated as "0 – generally without reservation" (in the subject/examiner relationship) show the highest abilities of cooperation with the examiner in a diagnostic situation. It might be thought that among them there are patients who are accustomed to doing various tasks (within diagnostic and/or therapeutic procedures) in individual contact with the examiner or therapist and, at the same time, they are without negative experiences in relationships of this kind.

1 – *with reservations*

Under this heading were listed undesirable behaviors inconsistent with the type of contact corresponding to the examination situation.

Subcategories:

1a – *narrowed distance, unofficial, familiar behavior*

1b – *excessive distance, withdrawal, aloofness*

1c – *openly negatively marked behavior (manifestation of aggression, irritation, suspicion etc.)*.

The following behaviors characterize subcategory 1a:

– initiating the physical contact (hugging or touching)

– a special form of addressing the examiner, familiarity (e.g. "*dziecko"* [child], *"córeczko"* [baby daughter], *"kotku"* [kitten=my dear], *"dziewczyno kochana"* [dear girl], *"kochanie"* [darling] or using the second person singular *e.g. "rozumiesz"* [Do you understand?]).

– swearing (here: uttered in the presence of the examiner but not directed to the examiner), intensified colloquialism

– ambiguous, intimate utterances, jokes.

Subcategory 1b was identified in the situation when there were significant nonverbal behaviors connected with the body posture, eye contact, facial expression, physical distance between interlocutors and also verbal behaviors (due to the subject's remarks, doubts). These behaviors might be the expression of the subject's disorientation in the examination situation, of the feeling of alienation in contact with the examiner, uncertainty, distrust or lowered mood, etc. The examiner – as a new person, seen for the first time – may not give the patient a sufficient feeling of safety. The feeling of alienation in the examination situation may result from indeterminate relationships between interlocutors, from the inability to sufficiently recognize the examiner in his/her role.

Subcategory 1c is characterized by clearly negatively marked behaviors: manifestations of aggression, hostile attitude to the interlocutor, irritation or suspicion, which appear temporarily in contact with the examiner, and manifest themselves in utterances. These behaviors, (in each of the examined person where they appeared) were of a transient character. They may be the reflection of the subject's general problems in contact with other persons; however, some reactions may denote that the subject feels that the examiner does not treat him/her properly (s/he has its own expectations and needs which are not perceived). The negative reactions may be provoked by the very fact of taking part in the examination which is associated with another diagnostic situation and is undesirable as a form of testing his/her abilities which may show the subject's deficits.[2]

With regard to the population of patients in a moderate stage of dementia, in respect of the functioning in the subject/examiner relationship, over half of the studied population received the grade "0 – generally without reservations" and in a vast majority this type of contact was classified as official, neutral (0a). 41.67% of the studied population were assessed as "1 – with reservations" with regard to the subject/examiner relationship: the narrowing of distance (1a) was reported most often; less often – negatively marked behaviors (1c); least often- excessive distance (1b).

The specification of detailed data is presented in Table 1.

With regard to the range of phenomena designated for the needs of this article, the results of the patients with a moderate stage of dementia are quantitatively presented in Chart 1.

2. Problems in the subject-examiner relationship. Exemplification of phenomena

The subject: a woman with a moderate stage of Alzheimer's dementia; a patient at the daycare community center for patients with Alzheimer's dementia

[2] Detailed characteristics of behaviors included in "Observation Card" with rich illustration material are included in the monograph presenting the results of examinations in a population of persons with Alzheimer's dementia together with the use of the experimental version of the "Scale of Narrative Skills" (Domagała 2015b).

Table 1. Functioning in the subject/examiner relationship (where: 0 – generally without reservations/ here 0a – official contact, neutral; 0b – official contact, positively marked; 1 – with reservations/ here: 1a – narrowed distance; 1b – excessive distance; 1c – negatively marked behaviors).

Functioning in the subject/examiner relationship	patients in a moderate stage of dementia (%)
0	58.33%
here : 0a	41.67%
0b	16.67%
1	41.67%
here: 1a	28.33%
1b	5%
1c	8.33%

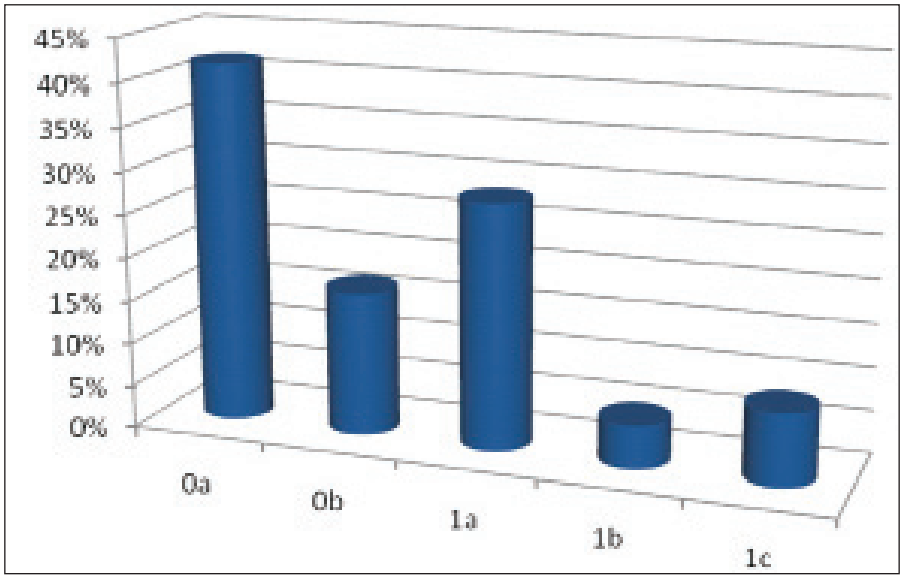

Chart 1. Functioning in the subject/examiner relationship (where: 0 – generally without reservations/ here 0a – official contact, neutral; 0b – official contact, positively marked; 1 – with reservations/ here: 1a – narrowed distance; 1b – excessive distance; 1c – negatively marked behaviors).

syndrome, permanently residing with her family, age: 77 years; education: secondary education. Evaluation of functioning in the subject/examiner relationship (according to the "Scale of Narrative Skills" in Part III. Evaluation of the subject's behavior in examination situation): "1 – with reservations" (here: 1a narrowed distance, unofficial, familiar behavior)

In the chosen case, on the basis of the interaction with the patient, one can ascertain her wrong recognition of the interlocutor (and thereby: wrong recognition of the system of social roles) – the examiner is probably identified as one of nuns with whom the patient was in very close relations in the past.

The register of forms with which she addresses the interlocutor is constant and – within the system perceived by the patient – coherent: It comprises the following forms: *siostro/siostrzyczko* [Sister/Dear sister]; siostra [Sister]+ 3rd person singular; *siostro/siostrzyczko*+infinitive; *kotuniu* [kitten=honey]

Example

A tu… może ja tu siedzę. Siostro, naprawdę? [And here…maybe I am sitting here. Sister, really?*]*

I chyba, coś siostra może jeszcze dołożyć, nie? [And you can give something more, can't you, Sister?]

I co, siostra chyba poprawi mnie na pewno coś? [And what, Sister will for sure put something straight for me?]

I chyba to by było wszystko siostrzyczko, nie? [And that would be all Sister, wouldn't it?]

No i chyba to by było siostrzyczko, coś poprawić mi, co tam, bo inaczej… [Well, that would be it, Sister, put something straight for me, never mind, otherwise…]

No chyba to by było wszystko siostrzyczko. [Well, it would be probably all, Dear Sister]

Tele/ tele/ telewizor może ogląda ten pan. Możliwe, możliwe. Tak że… kotuniu, no może być, bo przecież… [Tele/tele/television is watched by this man. Maybe, maybe. Yes,…Dear /kitten/, well it may be because…]

These forms of address are used at every stage of examination while fulfilling further tasks (constructing utterances in the form of description and storytelling on the basis of presented graphic materials) and during the process of self-assessment. Both at the beginning and at the end of the meeting the patient indicates that the office, where the examination is held, is known to her (she associates it with obtaining specialist advice (here: formally it is a psychologist's office, modestly furnished, without any clues to show its purpose).

Examples

U. K.: *Przed tym też byłam z jakąś rozmową, ale nie pamiętam…* […] *Na pewno całe o o tych osób roz/ opowiadać*. [Before that, I was here to talk but I don't remember…(…) Sure, talk about.. about… those people]

B: *Tak, tak.* [Yes, yes]

U. K.: *Tak wyczuwam.* [I feel so]

B: *Proszę dokładnie opowiedzieć, co jest na tym zdjęciu.* [Please, tell exactly what's in this photo]

U. K.: *Właśnie kotuniu.* [Exactly, Dear [=kitten].

U. K.: *Dziękuje bardzo, dziękuję. Już ja raz tutaj byłam, tylko z zębami (opowiada o wizycie, robieniu protezy).* [Thank you, thank you very much. I have been here once, only with teeth (she is talking about a visit, having dentures made)]

The subject's utterances, including those that are constructed on the basis of graphical materials during implementing the subsequent tasks, express a friendly attitude to the environment (a trustful attitude, conviction that the interlocutor will help her if necessary), a cheerful perception of the world, in accordance with her own religious convictions. Non-verbal behaviors are the expressions of her willingness to make/maintain a close, warm relationship with the interlocutor. The subject initiates physical contact – she touches the hands of the examiner, and strokes them.

Referring to the typology of phenomena concerning linguistic social roles in dementia (Domagała 2007, 2012b, 2013a) and because of measurable linguistic and non-linguistic indicators of the relationships between the interlocutors, the behaviors of the subject should be qualified as the wrong perception of the interlocutor and her relationship with him/her (here: wrong recognition: placing the interlocutor in a different group of people from the patient's surrounding circle: linguistic behavior characteristic of a different system of linguistic social roles). To a speech therapist it means the existing system resulting from the patient's wrong decisions regarding the communication situation. Diagnostic examination takes place within the system of roles and contacts described by the patient.

3. Problems in the subject/examiner relationship and the overall evaluation of the patient's behavior in the examination situation.

In the "Scale of Narrative Skills" the following items constitute the overall evaluation of the patient's behaviors in the process of interaction:

1/ the evaluation of functioning in the subject/examiner relationship and

2/ the evaluation of implementation of the examination procedure

The phenomena are registered in the following systems:

1) a lack of difficulties in the two distinguished aspects of behavior (grade: 0;0)

2) difficulties concerning the implementation of the examination procedure, and simultaneously, a lack of difficulties concerning the functioning in the subject/examiner relationship (grade: 0;1)

3) difficulties in functioning in the subject/examiner relationship and at the same time a lack of reservations about the implementation of the examination procedure (grade: 1;0)

4) difficulties in the two distinguished aspects of behavior (grade: 1;1)

The results show that the problems in the subject/examiner relationship are very rarely of an isolated character (about 3% of cases). They appear together with problems concerning the implementation of the examination procedure (ca. 38%) – the conditions for conducting the diagnosis of linguistic disorders are, in such cases, unfavorable. The form of the patient's utterances is conditioned by many factors – in many cases it is determined by the ability to function in contact with another person, in s social relationship (here in the subject/speech therapist relationship).

The specification of detailed data is presented in Table 2.

Table 2. The evaluation of the behavior of the patient in the examination situation – general results.

The evaluation of the behavior of the patient	0;0	0;1	1;0	1;1
Patients in a moderate stage of dementia (%)	11.67%	46.67%	3.33%	38.33%

In the quantitative aspect the results obtained in the population with a moderate stage of dementia are illustrated in Chart 2.

SUMMARY AND CONCLUSIONS

1) In the population of persons with a moderate stage of Alzheimer's dementia, the observation of the patients' behavior in a two-dimensional system (1/ functioning in the subject/examiner relationship; 2/ implementation of the examination procedure) shows a large differentiation of the phenomena. These two dimensions, which determine the evaluation of the patient's behavior in an examination situation, are important from the viewpoint of the analysis and interpretation of his/her linguistic activity under specific conditions by which they are determined. It should be noted that in Alzheimer's dementia, the interaction is disturbed due to various cognitive disorders (here: wrong recognition (identification) of people, which was illustrated in the text) and to non-cognitive ones which become stronger in the course of the illness. The varied character of difficulties diagnosed in particular cases will be a decisive factor in the individualization of the management of the patient in a post-diagnostic stage.

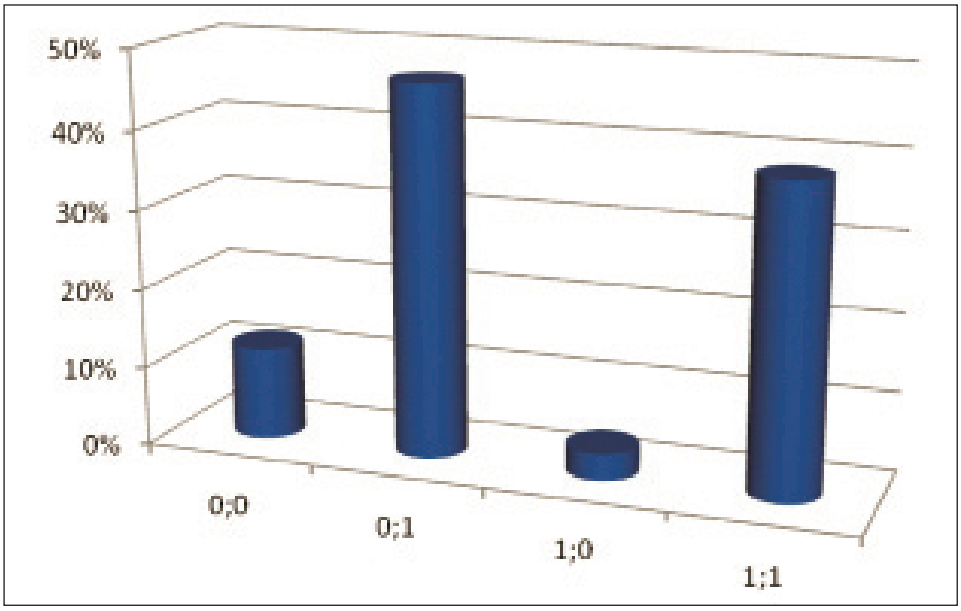

Chart 2. Overall evaluation of the patient's behavior in examination situation (where: 0;0 generally without reservations ; 0;1 – with reservations about the implementation of the examination procedure; 1;0 – with reservations about the functioning in the subject/examiner relationship; 1;1 – with reservations about the functioning in the subject/examiner relationship – and about the implementation of the examination procedure).

2) In the studied population, about 58% of subjects were able to function correctly in contact with the interlocutor. It should be noted that there were persons (ca. 17%) who were able to form a (strongly) positively marked relationship, and were characterized by high skills of cooperation with another person in a diagnostic situation. About 42% of the subjects showed difficulties in the relationship with the interlocutor. In many cases they signal to the examiner that a given communication situation is differently understood by the subject. From the logopedic point of view, it is necessary to diagnose in what relationships the subject functions satisfactorily and in which s/he does not; and whether there are any persons who can communicate with him/her. It should be acknowledged that a relationship can be improper as a result of the behaviors of the other person (the examiner, therapist, or carer), rather than a patient. Not all behaviors of the healthy interlocutor will correspond to the needs and abilities of an ill person: patients find it difficult, however, to express this lack of acceptance in a direct way (the feeling of alienation in an examination situation may, for example, result in widening the distance or neutralization of his/her own behaviors as if the patient wants to meet the challenges, retreating at the same time from the relationship in an interpersonal dimension). Negatively marked behaviors can be released or strengthened by

the very fact of participation in the examination which confronts the patient with the existing deficits (therefore, in contact with the patient the basic recommendations to the persons from his/her closest environment is: "don't test", especially in the programs of indirect therapy – Ripich et al. 2000; Small 2002; Domagała, Gustaw 2006; Domagała 2008a, 2011a, 2011b; Powell 2012 et al.).

3) The presented quantitative data on undesirable behaviors in a relationship with the interlocutor should be interpreted with prudence with regard to the patients with moderate dementia. Negatively marked behaviors have been seldom reported but the specificity of the examined population should be taken into consideration (in many centers, dealing with patients with dementia that offer not only care but therapy as well, the subjects undergo a special qualification – to be able to function in a group with other patients and take advantage of therapeutic procedures). In contact with a patient with an advanced stage of Alzheimer's dementia one should be prepared for clearly negatively marked behaviors – they may take place and require a reasonable reaction. Ascertainment of the occurrence of fundamental problems in the course of interaction, which make it impossible to communicate with the patient and to direct his/her behaviors, requires considering (also after consultations with other specialists) whether a speech therapy treatment in a direct form will be justified here; in some cases it will be pointless (Domagała 2015a, 2015c).

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