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A quantitative and qualitative analysis of changes during systemic family therapy: results of the Polish clinical version of the SCORE–15 questionnaire

Feliks Matusiak[1,2], Małgorzata Wolska[2], Romualda Ulasińska[2], Peter Stratton[3], Barbara Józefik[1, 2]

[1] Department of Child and Adolescent Psychiatry, Laboratory of Psychology and Systemic Psychotherapy, Jagiellonian University Medical College, Krakow, Poland

[2] Department of Adult, Child and Adolescent Psychiatry, Family Therapy Unit, University Hospital in Krakow, Krakow, Poland

[3] Leeds Family Therapy and Research Centre, University of Leeds, Leeds, UK

Summary

Aim. The article presents the results of a research project on the evaluation of changes during the process of systemic family therapy in a clinical group comprising adolescent psychiatric patients.

Method. The evaluation was conducted using Polish version of the SCORE-15 tool. The analysis was performed on a sample of 109 families who completed the questionnaire before their first session. Before the fourth session, the questionnaire was filled in by 73 families; and after the last session it was completed by 28 families.

Results. Consensual qualitative research method revealed changes in family's description of the family as well as in description of the problem. Statistical analyses of the results of the SCORE-15 questionnaire identified significant changes between the first, fourth and the final session. Changes were identified in the SCORE Total as well as in the VAS scales. The RCI showed 5 improvements and 2 deteriorations after three sessions, and no deterioration and 13 improvements at final one.

Conclusions. Obtained results point to many significant changes in the researched areas after completion of the systemic family therapy by families. The research also indicated that a coherent qualitative analysis of the descriptive material can be highly informative and can enrich both the understanding of the therapeutic process as well as the manner of providing feedback about the changes in the therapy to families.

Key words: family therapy, child and adolescent psychiatry

Introduction

Both long-term clinical observations as well as empirical research show the significance of various forms of family therapy in the treatment of emotional and mental disorders in children and adolescent, even making them at times a treatment method of choice. Worth mentioning here are periodical reviews by Alan Carr published in the *Journal of Family Therapy* on evidence-based interventions for couple and family therapy for children [1] and adults [2], including a 2016 paper summarizing and describing in detail which specific research-informed forms of family therapy for adolescents are best suited to treat particular types of problems [3]. Their results confirm the effectiveness and success of family therapy; however, the need to conduct further research remains. In this context, it is worth mentioning – greater than in the case of individual therapy – methodological and practical difficulties related to researching of the family therapy process resulting from its complexity, working in different configurations (of therapist and family members) or the necessity to include people of different age in the process, among other factors.

Systemic family therapy is an extremely broad approach encompassing numerous trends and frameworks. The concepts underlying the therapeutic practices covering families, both the classical ones as well as those within the constructionist-narrative paradigm, assume that emotional difficulties of children and adolescents are related to functioning of the family: its communication style, style of resolving conflicts, triangulation patterns, projections, individualization/separation processes, delegation of tasks and responsibilities, narration style. These phenomena, and many others not listed above, impact the perception of a child and the narration that is created within the family regarding that child's functioning. The aim of the therapy is the study and deconstruction of meanings given to a child's behaviors, the work on understanding his or her emotions and intentions and those of other family members (mentalization), the identification of mechanisms sustaining the presence of symptoms, the determination of the position of a child within family relationships and conflicts, the discovery of resources of a patient and a family.

The aim of this article is to present results of the research project on the effectiveness of systemic family therapy in a clinical group comprising psychiatric adolescent patients assessed using the Polish version of the SCORE-15 tool.

Two research questions were formulated:

1. If and what kind of changes occur in the process of systemic family therapy conducted in the natural clinical context?
2. If those changes are identified in all family members taking part in the therapy and at which stage of the therapy?

The research project was of the exploratory character and therefore no detailed research hypotheses were posed.

The research project was approved by the Jagiellonian University Bioethics Commission: KBET/125/B/2010.

Material and method

Instruments

The tool used in the research was the Polish version of the SCORE-15 questionnaire prepared under the supervision of Barbara Józefik. It is a 15-item version of the original tool developed by the following group of researchers: Julia Bland (principal investigator), Peter Stratton, Emma Janes, and Judith Lask. The development of the original version of the SCORE questionnaire was described in detail in an article by Stratton et al. [4]. In the article published in 2017 [5], the authors of the questionnaire gathered all information and reports available until 2016 related to the description of the SCORE tool – its structure, psychometric values and sensitivity to capture changes in the process of therapy. In their summary, the authors confirmed satisfactory psychometric and discriminating values of the English and Portuguese version of the tool. However, they also signaled the necessity to carry out further research on the tool. Translation and adaptation of the 15-item version to the Polish context are described in more detail in an article by Józefik et al. published in 2016 [6] which also additionally contains the results of a preliminary analysis of the changes occurring in a family between the first and fourth therapy session of 44 families and also dependencies between the results of family members and answers of therapists. The SCORE-15 questionnaire is available, in various language versions, at the AFT website: http://www.aft.org.uk/view/15101224f1e.html?tzcheck=1.

The SCORE-15 questionnaire is divided into 4 parts. The first part consists of 15 items further divided into 3 scales: strengths and adaptability; overwhelmed by difficulties; disrupted communication. The second part includes 3 open-ended questions: "Which words best describe your family?"; "What problem/reason made you come to therapy?"; "The problem is:…". The third part consists of three additional visual analogue scales (VAS) that allow for a quantitative assessment on a 0-10 continuum: "How serious is the problem?"; "How do you cope as a family?"; "Do you think therapy will be/has been helpful?". The purpose of the fourth part is to compile basic demographic data on the subject.

Procedure

The applied research procedure was designed in line with the requirements of the authors of the original version. All the families referred to the Family Therapy Unit (FTU), two weeks prior to the consultation session received an invitation from the research team to take part in the study, which included standardized information on the project. Immediately before the first consultation session, the family members that had agreed to participate in the project completed the SCORE-15 questionnaire for the first time. The second assessment was scheduled just before the fourth session and the third after the final meeting. Those families that did not show up for their final session or cancelled it received the questionnaire via mail.

All the families that were referred to the FTU for therapy between October 5, 2010 and October 21, 2013 were invited to take part in the research project. The FTU provides

family therapy based on the systemic model. During the time of the research, the consultations and therapy were provided by a 7-person psychotherapeutic team comprising 5 certified psychotherapists, of whom 3 were simultaneously supervisors, and 2 others engaged in professional training to obtain their psychotherapist's certificate. The FTU is an institution with the highest level of referrals, and which usually provides therapy to the most difficult patients whose treatment in other facilities has failed. It also provides professional training in family therapy. During these 3 years, the research team invited to the project 214 families that met the initial criteria. Fifty-two of those families did not show up for the first scheduled session and another 40 declined to participate in the study. A total of 13 families withdrew from the project while waiting for the first consultation session due to a change in the form of treatment received from outpatient to in-patient. The remaining 109 families (comprising 332 family members), agreed to participate in the project and completed the questionnaire before the first consultation session. Before the fourth session, the questionnaire was filled in by the members of 71 families (202 individuals), and after the final session by the members of 28 families (85 individuals). However, the number of results subjected to statistical analysis was lower. This was due to the fact that some family members missed the first or second or third SCORE-15 assessment. It was impossible to compare the change in the results because of that. Only complete sets of questionnaires have been statistically analyzed in the context of change: first SCORE-15 test: 109 families (328 individuals), second one: 65 families (185 individuals), third one: 26 families (73 individuals). Table 1 shows the characteristics of the group in the context of the diagnoses of identified patients adjusted for changes in participation in subsequent assessments.

Table 1. **IP diagnosis and participation in subsequent stages of the study**

Diagnosis according to ICD 10	Before session 1	%	Before session 4	%	After final session	%
Eating disorders	36	33.5	28	38↑	13	46↑
Conduct disorders	27	25	15	21↓	5	18↓
Psychosis	7	6.5	4	5↓	0	0↓
Mood disorders	13	12	9	12	1	4↓
Adjustment disorders	15	14	10	14	2	7↓
Anxiety disorders	10	9	7	10↑	7	25↑
TOTAL	108	100	73	100	28	100

IP – identified patient

Table 2 shows the reasons why families dropped out of the project in its subsequent stages.

Table 2. **Reasons for drop-out after each stage of the study**

The reason for discontinuation	After first SCORE test	After second SCORE test	Complete
Family dropped out with no notification	14	13	0
Deterioration – IP hospitalization	3	5	0

table continued on the next page

Discontinuation of therapy against therapist's advice	7	9	0
Agreed discontinuation	3	10	28
Withdrew consent for the research	8	2	0
Unknown – no data	3	4	0
TOTAL: 109	38	43	28

IP – identified patient

Data analysis methods

The data obtained in the study were analyzed using quantitative and qualitative methods. Factor analysis was conducted on the data collected from 332 participants during the first assessment, with 4 records removed due to a significant amount of information missing. Exploratory factor analysis was performed to establish patterns of correlation between the observed SCORE positions. The factorability of the correlation matrix was assessed using Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy [7]. The final number of factors was determined by means of principal component extraction (PCA) with a number of criteria to fulfil [8–11]. The analyses were based on the following methodologies: Kaiser's criteria with eigenvalues greater than 1 [12], parallel analysis with the cut-off point set at the 95th percentile [13], a scree plot [14] and the interpretability of the structure of retained factors [11]. In parallel analysis (based on the macro devised by O'Connor [11]), which was conducted with PCA and permutations of raw data (2000 parallel data sets), the actual eigenvalues were compared with random order eigenvalues. The factors were established when the actual eigenvalues surpassed the random ordered eigenvalues. Then the principal axis factor (PAF) extraction method was applied. The internal consistency of the factors was tested using Cronbach's alpha. The statistical analysis was performed using SPSS v.24 (IBM).

Because of the factor analysis result that indicated the presence of 2 factors (section "Results" in Table 3) in the Polish version of the tool, instead of the initially assumed three-factor structure, the authors decided to continue quantitative analysis based on the results of the main SCORE scale and VAS scales. The Wilcoxon test was applied to compare the results of assessment 1 (before the first session) and assessment 2 (before the fourth session) as well as the results of assessment 1 (before the first session) and assessment 3 (after the final session). The group of 26 families which completed all three assessments as well as the therapy in accordance with the guidelines agreed upon with their therapist was expanded to include additional 10 families that also completed the therapy according to the guidelines agreed upon with their therapist but did so during their fourth or fifth session, meaning that they only completed two assessments. To avoid the problem of nesting (many scores that are nested within families) the authors compared results within groups of patients, mothers and fathers separately.

To perform a comparative analysis of the responses to two of the three open-ended questionnaire questions, i.e., "Which words best describe your family?" and "The main

problem is:…", the authors used Consensual Qualitative Research Methodology: CQR-Modified: CQR for Simple Qualitative Data [15]. The descriptive data were categorized by a team of three researchers who differed from one another in terms of age, gender, educational background, and psychotherapeutic experience. The categories were subsequently compared with regard to changes in the frequency of their occurrence between the first assessment (before therapy) and the third one (after completing therapy).

Results

Factor analysis

Bartlett's test of sphericity was highly significant ($p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure was 0.927. Both values support the factorability of the correlation matrix. All the criteria showed two factors to retain (eigenvalues: 6.20 and 1.42, initial variance accounted for each factor: 41.34% and 9.46%, in total: 50.8%). Table 3 shows the results of the exploratory factor analysis. In contrast to the English [16] and Portuguese [17] versions, which retain the original three-factor structure, the analysis of the Polish version revealed a two-factor structure of the questionnaire. Two factors were retained with high Cronbach's alpha coefficients. However, a few issues should be highlighted. Firstly, there are two cross-loaded items (item 12 and item 15). Secondly, four items have low communalities, i.e., item 2, item 4, item 8, and item 13. The correlation coefficient between the first and the second factor was negative and very high (0.59), which supports the hypothesis regarding factor structure. Items 2, 4, 8, and 13 with low communalities and item 12, which loads to both factors, were all items on the "disrupted communication*"* scale. This scale in the Polish version of the questionnaire appears to be weak. However, Cronbach's alpha calculations for the three original scales were satisfactory: "strengths and adaptability": 0.810; "overwhelmed by difficulties": 0.825; "disrupted communication": 0.701.

Table 3. **Results of factor analysis**

Factor	Items/scale	Factor loadings		Communalities	Cronbach's Alpha
		F1	F2		
F1	9. overwhelmed by difficulties	0.810	0.343	0.610	0.860
	7. overwhelmed by difficulties	0.776		0.518	
	11. overwhelmed by difficulties	0.678		0.546	
	5. overwhelmed by difficulties	0.677		0.399	
	4. disrupted communication	0.513		0.317	
	14. overwhelmed by difficulties	0.495		0.471	
	12. disrupted communication	0.442		0.492	
	8. disrupted communication	0.367		0.285	
	2. disrupted communication	0.305		0.245	
	Variance explained by 1st factor				37.7%

table continued on the next page

F2	10. strengths and adaptability	0.352	0.739	0.428	0.808
	3. strengths and adaptability		0.680	0.551	
	1. strengths and adaptability		0.635	0.516	
	6. strengths and adaptability		0.628	0.449	
	15. strengths and adaptability		0.399	0.447	
	13. disrupted communication		0.376	0.281	
	Variance explained by 2nd factor				6.0%
Total explained variance					43.7%

F1 – the first factor; F2 – the second factor.

Changes in quantitative results between first and fourth session

Sixty-five families participated in both assessments (before the first and the fourth session). Comparison of the total SCORE result was performed separately in groups of patients, siblings, mothers, and fathers.

There were no statistically significant differences with regard to the medians of the total SCORE results before the first and the fourth therapy sessions between patients ($n = 65$; $p = 0.457$), between the patients' mothers ($n = 60$; $p = 0.228$), fathers or stepfathers ($n = 33$; $p = 0.231$), and between siblings ($n = 25$; $p = 0.696$). Similarly, the analysis of differences in VAS scales results between patients, fathers and stepfathers, and siblings did not reveal any statistically significant differences. However, in the case of the mothers, significant differences were observed in the case of two VAS scales, i.e., "How serious is the problem?" and "How do you cope as a family?". After three sessions, the mothers reported that the problem had become less severe ($p < 0.000$) and that their families were coping better as a unit ($p < 0.017$). Figure 1. shows the Jacobson reliable change index (RCI) [18] for the total SCORE result measured between the first and the fourth sessions with a 95% confidence interval.

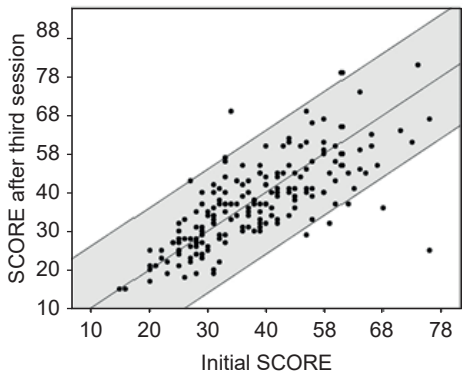

Figure 1. **Jacobson RCI before fourth sessions**

Changes in quantitative results between the first and final sessions

Thirty-six families participated in both assessments (before the first and after the final session). The total SCORE results for different groups, i.e., patients, mothers and fathers, were compared separately. The siblings group was too small for a statistical analysis to be performed.

In all three groups the total SCORE results following therapy were significantly lower. There were statistically significant differences with regard to the medians of the total SCORE results before and after therapy between patients ($n = 36$; $p < 0.001$). The SCORE median among the patients before therapy was 36.5 and after therapy 31. There were statistically significant changes with regard to the SCORE medians among patients' mothers ($n = 35$; $p < 0.001$). The SCORE median of mothers ($n = 35$) before therapy was 38 and after therapy it was lower and was 30. The medians of fathers or stepfathers changed significantly due to therapy ($n = 20$; $p = 0.031$). The SCORE median of fathers or stepfathers before therapy was 34.5 and after therapy it was lover and was 32.5. The analysis of differences between VAS scales also revealed significant differences. On the "How serious is the problem?" scale, improvement was observed in the group of patients ($p < 0.001$), in the group of mothers ($p < 0.001$) and in the group of fathers ($p = 0.01$). On the "How do you cope as a family?" scale, improvement was observed in the group of patients ($p = 0.009$) and in the group of mothers ($p = 0.005$). Figure 2 shows the Jacobson reliable change index (RCI) [18] for the total SCORE result measured before the first and after the final session with a 95% confidence interval.

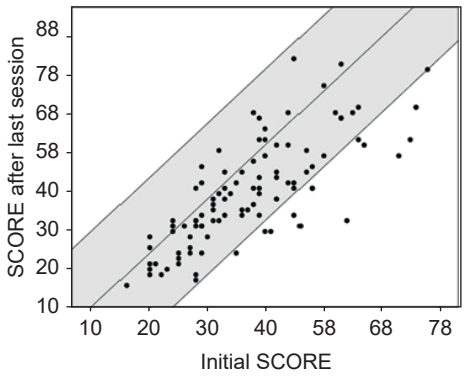

Figure 2. **Jacobson RCI after the entire SFT process**

Qualitative analysis – changes in family description between first and final sessions

A qualitative analysis of the responses to the question: "Which words best describe your family?" showed that participants provided on average 2.4 descriptions per person in the first assessment and 2.5 descriptions after the final assessment. Table 4 shows the most commonly encountered categories identified during the course of the analysis together with the frequency of their occurrence.

Table 4. **Categories of family descriptions**

:		SCORE1 number	SCORE1 (%)	SCORE3 number	SCORE3 (%)
General /non-relationships	Positive	54	32	80	45
	Negative	18	11	23	13
Relationships	Positive	27	16	29	16
	Negative	23	14	7	4
Formal/Contextualized		28	17	15	9
Other		17	10	22	13

table continued on the next page

SUM of descriptions	167	100	176	100
People in total	69		70	

The category "General/non-relationship family descriptions" (together with the "positive" and "negative" sub-categories) contains or groups together phrases that attribute certain characteristics to a family as a whole: positive or negative, without identifying family members or the relationships between them. From a grammatical point of view, the descriptions were dominated by nouns and adjectives. Examples of generally positive descriptions included: "cheerful, dear, compliant, happy, love, warmth, loving, security, understanding, emotional, helpful"; examples of generally negative descriptions included: "nervousness, war, chaos, misunderstanding, lost, tension". The "Relationship descriptions" category usually contained more complex descriptions that take into account the dynamics of the interactions between family members, subjectivity and the importance of particular individuals for other family members. Examples of descriptions of positive relationships included: "taking care of everyone together and each person separately; we are harmonious; we trust each other; we are important for each other"; examples of descriptions of negative relationships included: "don't know how to get along, 'sparks fly' mainly between men; poor contact with daughters". Category "Formal/contextualized descriptions" included phrases describing a family by referencing its formal aspects or by placing it in a larger social-cultural context, e.g.: "normal, large, catholic, traditional, typical, average, educated". Other, less frequent categories included descriptions of attitudes toward problems, e.g., "we're working on improving the situation", or defined a family through a person or a sub-system, e.g.: "father".

Table 4 presents a comparison between the beginning and end of therapy with regard to the frequency of occurrence of the main categories. There are a couple of interesting things to note here: (1) an increase in the number of generally positive descriptions of all family members; (2) a decrease in the number of descriptions of negative relationships after therapy, mainly in the case of mothers and daughters (fathers and sons generally did not use this category); (3) a decrease in the number of descriptions of a family based on its formal aspects in the case of parents, especially fathers (children generally did not use this category).

Qualitative analysis – a change in the description of a problem between the first and final sessions

A qualitative analysis of the responses to the question: "The main problem is…" revealed that the participants provided on average 1.4 descriptions per person in the first and final assessments. Table 5 shows the most frequently encountered categories identified in the course of the analysis together with frequency of their occurrence.

Table 5. **Categories of problem descriptions**

:	SCORE1 number	SCORE1 (%)	SCORE3 number	SCORE3 (%)
Diagnosis/symptom	40	41	21	21

table continued on the next page

Through relationships	19	20	14	14
Through areas of difficulty	37	39	48	48
Through change	0	0	16	16
Other	0	0	1	1
SUM of descriptions	96	100	100	100
People total	68		70	

The "Description through diagnosis/symptoms" category featured medical language: "anorexia, hyperactivity, depression, anxiety, suicide". The "Description of a problem through a relationship" category included phrases related to the dynamics of interactions within a family, e.g., "there are misunderstandings between parents and a long-growing conflict between them; currently, there's no agreement with my husband/father, relationship with my son". The "Description through area of difficulty" category included non-relationships and non-medical terms and phrases such as: "school, uncontrollable outbursts of anger, bad behavior, working on my daughter's emotions, cleaning". The final category, "Description of a problem through change", appeared in the final assessment and included phrases concerning the dynamics of changes in problems: "the problem seems to be resolved, malnutrition – but it is getting better and going in the right direction". Table 5 provides a comparison between the beginning and end of therapy with regard to the frequency of occurrence of the main categories. There are a couple of interesting things to note here: (1) a significant decrease in the number of medical descriptions (symptoms and diagnosis) in favor of phrases describing areas of difficulty in functioning; (2) the appearance, following the end of therapy, of descriptions of changes (mainly for the better) in problem areas.

Analysis and discussion

The presented research showed that in the course of family therapy process that integrates various trends of systemic theory and practice changes occur in the research participants in terms of the perception of family relations, the manner of defining difficulties, understanding of patient's problems and problematic areas within a family, and also assessment of family resources. This manifests in the change of narration related to the aforementioned issues, among other noticeable changes. The results showed that initial changes (identified by mothers) occur already after the fourth session and intensify as the therapy process continues. Research analysis showed significant changes on two of the VAS scales between the first and fourth session (ca. 6–8-week period) in the case of the patients' mothers. This result confirms pilot analyses performed on some of the research group subjects (44 families, 130 individuals) – an improvement in the results on the scale "How serious is the problem?" in a study conducted by Józefik et al. [6].

The results revealed that after 3 sessions of family therapy, the patients' mothers reported they focused less on the problem that brought them to therapy (VAS scale: "How serious is the problem?") and they noticed their families were coping better (VAS

scale: "How do you cope as a family?"). This indicates that according to the mothers' assessments, after going into therapy problems are not experienced as so acute and do not impose so much of an emotional burden on family members who cope better with problems. We may assume that this change is due to emotional support and provides a clear framework and structure for the treatment process, both of which are objectives of therapeutic interventions in the first phase of the therapy. This would indicate the effectiveness of therapeutic interventions designed to lessen the sense of hopelessness and anxiety experienced by family members, de-burden them and give them hope that therapy will help them overcome their troubles and problems. As changes are communicated only by mothers, it seems to highlight their greater involvement in solving reported problems. Juxtaposing these results with the level of parental participation in the first therapy session (97% of mothers and 56% of fathers) as well as with the particularities of Polish, traditional society, we may assume, with some caution, that it is mainly mothers who feel burdened by such problems and who feel responsible for any dysfunctional behavior in their children, and after the beginning of therapy, who become de-burdened the most and notice positive changes the quickest. Our practice shows that it is usually mothers who seek help and decide to contact relevant health institutions.

Also, worth noting are the characteristics of the families who dropped out of therapy after the first session. The analysis of Table 2 reveals a quite proportionally high drop-out rate for families with adolescents suffering from mood disorders, adaptation disorders and psychosis. We noted a faster drop-out rate in the case of families with adolescents suffering from behavioral disorders and a slower drop-out rate in the case of those with eating disorders and anxieties (with OCD being the most prevalent). It seems that the seriousness of such problems as eating disorders and acute OCD may have an impact on a patient's motivation to undergo treatment while the turbulent and chaotic characteristics of families associated with the impulsiveness of adolescent with behavior disorders may speed up the decision to drop-out of therapy. These observations require further verification. We noted a relatively high number of drop-out families – 61% of individuals (members of 65% of families) took part in the second assessment and only 26% of individuals (members of 26% of families) took part in the third one. However, it is worth noting that in similar research projects in other countries, the number of drop-outs was even greater: in a multi-center study in the UK, 46% of individuals took part in the second assessment [19]. In a comparable Italian project, 45% of families took part in the second assessment and only 14% in the third one [20].

The analysis of the changes in the quantitative results between the first and the last session revealed significant changes in all groups (patients, mothers and fathers) on both the SCORE scale and on the VAS scales. The only scale that did not change significantly was the VAS scale "How do you cope as a family?" in the case of fathers. The graph illustrating RCI following the end of therapy (Figure 2) also indicates a significant positive change in the patients. However, it should be noted at this point that the group that completed therapy is heterogeneous in terms of treatment duration. Our research procedure provided for third assessment after the completion of therapy, which in the case of some families might have meant 6 sessions and in the case of

others up to 30 meetings. The trend regarding changes in the proportion of diagnoses described after the second assessment was sustained. Obtained results correspond with the outcomes achieved by other authors showing a positive change in the research subjects after taking part in systemic family therapy [16, 19, 20].

The descriptive scales "Which words best describe your family?" and "The main problem is:…" were found to be a great value of the SCORE tool. The free responses to these questions may provide clinically important information on the functioning of a family. This is especially true in the case of children and teenagers who often find it easier to write about difficult experiences, e.g., abuse, than introduce such topics into conversations in their parents' presence. The responses can also be used for the purposes of qualitative analysis. In the present research, the results showed an increase in the use of positive family descriptions after therapy with a decrease in negative, critical descriptions of relationships. This result appears to be consistent with the assumptions and aims of systemic family therapy in which people work on building intra-family resources that help family members provide support for each other as well as on improving communication. It also encourages constructive ways of solving problems and de-burdens the family from the odium of guilt for a child's illness. Similarly, a result indicating a change in the manner of defining a problem from a medical to a more problem-based and interactive one, thereby increasing a family's sense of agency regarding the difficulties it experienced and coping with those, was expected.

Indicators of positive change obtained in the research were satisfying. The analysis of the reasons why participants dropped out of the study may imply that this group was dominated by individuals who did not notice any positive changes. These observations may be associated with the aforementioned profile of the unit where the study was conducted. It often provides treatment to individuals who had already tried other forms of treatment with no success, who had a long history of illness and treatment and had experienced a significant escalation in psychopathological symptoms at the moment of enrolling into therapy.

Limitations of the research

The results if the analysis of the psychometric values of the Polish version of the SCORE-15 tool require further studies. Particularly, doubts are related to its factor structure and the value of the "Disrupted communication" scale. Vagueness as to the factor structure already appeared in the literature and was described in more detail in the article from 2017 by Carr and Stratton [5]. Taking into consideration the above, the authors abandoned further analysis of changes within the sub-scales and focused on the overall SCORE result, changes in the VAS scales and answers to the open-ended questions. It should be noted, however, that the Polish version has so far only been applied in clinical population studies. However, other available literature showed that the questionnaire in the English and Portuguese version differentiate between population and clinical group [4, 16, 21]. Research on Polish population, which will make another factor analysis and further verification of observed doubts possible, is planned

in the future. From a clinical perspective, the impossibility of observing changes in sub-scales appears to have been a huge loss.

Another limitation of the research was the lack of tools verifying potential dependency between changes in the SCORE questionnaire and the change in the area of psychopathology of the patients taking part in family therapy. Additional difficulty that the researchers faced was the relatively low percent of completed questionnaires at the subsequent stages of the project – similar problem was also reported by other research teams [19, 20]. It also seems that assessment with the SCORE-15 questionnaire could be conducted at regular intervals, e.g., every four sessions, so it is possible to capture the exact moment of therapy when the greatest change occurs. With the procedure used in the presented research project, it was not possible to determine such moment.

Conclusions

1. Obtained results allowed us to describe changes occurring in the course of systemic family therapy. They also showed that even though before the 4th session only mothers reported a change in the gravity of the problem and better functioning of the family, at the end of the therapy process these changes were also identified and noted by patients and partially by fathers. Additionally, at the end of therapy process, a significant improvement on the main SCORE scale, which is a combination of communication skills, family resources and the manner of experiencing difficulties, was noted in all family members.
2. Qualitative analysis of the research data showed changes in the narration of family members related to the reported problem, family relationships and functioning of the family as a whole occurring as a result of therapy and demonstrated by: (1) an increase in the number of overall positive descriptions after completion of therapy in all family members; (2) in mothers: a decrease in the number of negative relational descriptions; (3) in parents, mainly fathers: a decrease in the number of descriptions of the family through its formal aspects.
3. Fairly simple and straightforward implementation of the SCORE-15 questionnaire and relatively short time required to complete it make it a useful tool that can be used to monitor changes occurring in the process of family therapy conducted in a clinical environment. It should, however, be noted here that it is necessary to further verify psychometric values of the Polish version of this tool.

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Address: Feliks Matusiak
Laboratory of Psychology and Systemic Psychotherapy
Department of Child and Adolescent Psychiatry
Jagiellonian University Medical College
31-501 Kraków, Kopernika Street 21A
e-mail: feliks.matusiak@uj.edu.pl