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Research Article

INTERRELATIONSHIP OF PSYCHOLOGICAL DISTRESS, BASIC BELIEFS AND PERCEPTIONS OF FAMILY RELATIONSHIPS IN INFORMAL CAREGIVERS OF CHILDREN AND ADULTS WITH EPILEPSY

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BACKGROUND: Relatives caring for an epilepsy patient play a significant role in the care system and maintaining the well-being of the chronically ill and often suffer from significant stress.

AIM: The aim of the study was to reveal the relationship of psychological distress, basic beliefs and perceptions of family relationships in relatives taking care of children and adults with epilepsy.

MATERIALS AND METHODS: The study involved 62 relatives caring for patients with epilepsy, 44 relatives of children (mean [\pm SD] age, 34,64 \pm 6,73 years) and 18 relatives of adults (mean [\pm SD] age, 48,72 \pm 10,99 years). The Symptom Checklist-90-Revised (SCL-90-R), the World Assumption Scale and the Family Environment Scale was used as an assessment tools. Also semi-structured interview for assessing socio-demographic and clinical characteristics was applied.

RESULTS: The results of the study revealed significant similarities of the studied groups both in the explication of the psychopathological symptoms and in perception of their own personality, the surrounding world and intra-family interaction. Informal caregivers of such patients demonstrates significant variability and severity of psychopathological symptoms. And their perception of themselves and the surrounding world is characterized by the “façade” tendencies that act as psychological protection that prevents the catastrophizing of the subjective assessment of the situation associated with the chronic disease of a loved one.

CONCLUSIONS: The study demonstrated the need to develop specialized psychotherapeutic interventions aimed at reducing the level of psychological distress in informal caregivers of patients with epilepsy. During the development and carrying out of such interventions, it is important to take into account the subjective assessment of caregiver’s available life situation, as well as his/her personal values and attitudes that largely determine the severity of psychopathological symptoms.

Keywords: epilepsy; informal caregivers; psychological distress; basic beliefs; perception of family relationships.

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Научная статья

ВЗАИМОСВЯЗЬ ПСИХОЛОГИЧЕСКОГО ДИСТРЕССА, БАЗОВЫХ УБЕЖДЕНИЙ И ВОСПРИЯТИЯ СЕМЕЙНЫХ ОТНОШЕНИЙ У РОДСТВЕННИКОВ, ОПЕКАЮЩИХ ДЕТЕЙ И ВЗРОСЛЫХ, СТРАДАЮЩИХ ЭПИЛЕПСИЕЙ

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Актуальность. Родственники, осуществляющие уход за больным эпилепсией, играют значительную роль в системе оказания помощи и поддержке благополучия хронически больного и часто испытывают воздействие значительного стресса.

Цель – изучение взаимосвязи психологического дистресса, базовых убеждений и восприятия семейных отношений у родственников, опекающих детей и взрослых, страдающих эпилепсией.

Материалы и методы. В исследовании приняли участие 62 родственника, опекающих больных эпилепсией, 44 родственника, опекающих детей, – средний возраст родственников составил 34,64 [среднеквадратическое отклонение (SD) = 6,73] года, и 18 родственников, опекающих взрослых, – средний возраст 48,72 (SD = 10,99) года. В работе применялись специально разработанная анкета для оценки социально-демографических и клинических характеристик, опросник выраженности психопатологической симптоматики – Symptom Checklist-90-Revised, Шкала базисных убеждений и Шкала семейного окружения.

Результаты. Результаты исследования выраженности психологического дистресса, базисных убеждений и восприятия семейных отношений в изучаемых группах родственников позволили выявить значительное сходство как в эксплицитности симптоматических проявлений у близких больных, так и в восприятии ими собственной личности, окружающего мира и внутрисемейного взаимодействия. У близких таких больных отмечается значительная вариативность и выраженность психопатологической симптоматики, а демонстрируемое родственниками восприятие себя и окружающего мира характеризуется выраженностью «фасадных» тенденций, выступающих в качестве психологической защиты, препятствующей катастрофизации субъективной оценки ситуации, связанной с хронической болезнью близкого.

Заключение. Проведенное исследование продемонстрировало необходимость разработки специализированных психотерапевтических мероприятий, направленных на снижение уровня психологического дистресса у родственников, опекающих больных эпилепсией. При создании и проведении таких мероприятий важен учет субъективной оценки наличной жизненной ситуации опекающим родственником, а также его личностных ценностей и установок, во многом определяющих выраженность психопатологической симптоматики у данного контингента.

Ключевые слова: эпилепсия; родственники, опекающие больных; психологический дистресс; базисные установки; восприятие семейных отношений.

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BACKGROUND

According to the World Health Organization, epilepsy is a severe chronic disease with a prevalence of 4–10 per 1000 people [13].

The medical and social consequences of epilepsy significantly and negatively affect the quality of life of patients. The feeling of loss of control and independence, fear, depression, stigmatization and self-stigmatization, social restrictions, and financial difficulties are described as common consequences of this disease [20]. The problems of socialization in children and adolescents with epilepsy are an important research topic [3, 4, 7, 15].

Epilepsy accounts for a significant proportion of the global disease burden [13]; thus, the development of strategies to reduce the social and economic damage associated with this disease is one of the primary tasks of public health.

In recent decades, researchers pay increasing attention to relatives who care for patients with epilepsy. These relatives of patients received close attention because they are essential in the efficiency of therapeutic measures and the maintenance of the patient's well-being; however, the diagnosis of epilepsy in one of the family members reduces the quality of life of the relatives and increases the risk of occurrence of stress-related mental and somatic disorders in both the relatives directly taking care of the patient and all other family members [2, 6, 9, 11, 15, 22].

The caregiver of a patient with epilepsy administers medications, arrests seizures, monitors and communicates information about the symptoms of seizures to medical professionals, maintains patient self-care functions, provides psychological assistance to the patient, etc. [17]. Such a burden is associated with significant stress for the patient's relatives.

In modern research, the difficulties and experiences of relatives caring for patients with chronic illness are most often conceptualized within the "burden" model.

Most of the studies on the "burden" of caring for a patient with epilepsy and issues related to the quality of life of those the relatives focused on the pediatric population [2, 5, 11, 15, 19]. Data on guardians of adult patients are much rarer [16, 17, 21].

Trials aimed at studying relatives who care for patients with epilepsy, regardless of the age of these patients, describe a significant decrease in the caregivers' quality of life, anxiety and depressive disorders, and dissatisfaction with social support [5, 14, 15, 17–19, 21]. Moreover, comparing literature data on relatives caring for patients with epilepsy of different ages is currently difficult because of differences in research and diagnostic methodologies.

Although studies have demonstrated a clear relationship between burden and distress in caregivers of patients with epilepsy and characteristics of functioning of their family system [17], and the significance of the subjective assessment of the situation by the caregiver in the process of adaptation to the disease, perception of family relationships, and characteristics of the axiological aspect of the personality of those relatives remain insufficiently studied.

This study aimed to examine the relationship between psychological distress, basic beliefs, and perceptions of family relationships in relatives who care for children and adults with epilepsy.

MATERIALS AND METHODS

The study involved 62 relatives [17 men and 45 women, mean age 34.64 years, standard deviation (*SD*) 6.73] caring for patients with epilepsy who were treated at Department No. 7 of the V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology of the Ministry of Health of Russia and the Psychoneurology Department of the St. Olga St. Petersburg Children's City Hospital. The diagnosis was established by expert doctors, and the main diagnosis was G40 according to the International Classification of Diseases 10th Revision.

Depending on the age of the patients, the relatives were distributed into two groups. The RA group included relatives of adult patients ($n = 18$), and the RC group consisted of relatives of children with epilepsy ($n = 44$).

The study was approved by an independent ethics committee at the V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology (Protocol No. EK-I-35/21).

The inclusion criteria were as follows: close family relationship (mother, father, wife, and husband) with a patient suffering from epilepsy (G40), the age of the relative was >18 years, and voluntary consent to participate in the study.

The non-inclusion criteria were as follows: comorbid mental pathologies (schizophrenia, manic-depressive psychosis, major depressive disorder, and addictive disorders) in a patient under the care of a relative and current or history of severe mental or cognitive impairment and severe somatic, neurological, and other diseases in a state of severe decompensation in the relative that prevent the examination.

The study employed a cross-sectional research design.

The study also used the data we have collected in previous trials [1] and data from other studies [8, 10]. To compare the results obtained according

to the questionnaire for the severity of psychopathological symptoms (Symptom Checklist 90-Revised [SCL-90-R]), we analyzed the data obtained by the Laboratory of Psychology of Post-Traumatic Stress and Psychotherapy of the Institute of Psychology of the Russian Academy of Sciences from a population exposed to chronic psychotraumatic events, namely, refugees (reference group) [10]. To refine the results on the World Assumptions Scale (WAS), reference data obtained during the adaptation of methods [8] were considered. To compare the results obtained on the Family Environment Scale (FES), we used the reference data we have obtained on a sample of respondents without visible somatic, narcological, and psychiatric pathologies [1].

Research tools. The study was conducted using test and clinical and psychological methods. Each relative was interviewed, during which a specially designed questionnaire was filled out, which included the clinical and sociodemographic characteristics of the participants, their families, and patients. The Psychopathological Symptom Severity Questionnaire SCL-90-R adapted by N.V. Tarabrina [10] was used to study the severity of psychopathological manifestations and assess the intensity of the experienced distress, the WAS adapted by M.A. Padun and A.V. Kotelnikova [8] was used to analyze the relationship to themselves and their surroundings, and the FES adapted by S.Yu. Kupriyanov [12] was used to study the peculiarities of the relatives' perception of intrafamily relations.

Statistical processing. Data analysis was performed using IBM SPSS Statistics version 21 (IBM Corp., Armonk, NY, USA). The normality of the distribution of quantitative indicators in each group was tested using the Shapiro–Wilk test. When conducting a comparative analysis, the Kruskal–Wallis method was used, followed by the Mann–Whitney *U*-test. To compare the results obtained in the study groups with the reference data presented in the literature, a one-sample Student's *t*-test was used. For indicators with normal distribution, the mean (*M*) and *SD* were calculated, whereas for other indicators, the median (*Me*) and interquartile range (*IQR*) were calculated. For reference indicators, sample frequencies were compared using Pearson's χ^2 test. Differences between groups were considered statistically significant if the *p* values obtained were <0.05 . Spearman's correlation coefficient was used as a measure of the relationship between the indicators.

RESULTS

Sociodemographic and clinical indicators

In the RA group, 5 were men and 13 were women. The average age of the relatives was

48.72 (*SD* 10.99) years. The majority had higher (61.1%) or vocational secondary education (27.8%), and 88.9% were employed at the time of the study. The average age of the patients was 28.23 (*SD* 8.423) years, the average age at disease onset was 17.11 (*SD* 6.286) years, and the average disease duration was 6.56 (*SD* 12.88) years.

In the RC group, 12 were men and 32 were women. The average age of the respondents was 34.64 (*SD* 6.73) years. The majority had higher (75%) or vocational secondary education (13.6%), and 63.6% of them were employed at the time of the study. The average age of the patients was 4.72 (*SD* 4.59) years, the average age at disease onset was 1.51 (*SD* 2.932) years, and the average disease duration was 3.10 (*SD* 3.14) years.

Comparison of the studied groups of relatives according to sociodemographic and clinical characteristics showed a significant similarity of the samples in terms of sex, education, and social status. Given the characteristics of the samples, significant and expected differences were found in the age of the relatives examined ($p < 0.001$) and the patients under their care ($p < 0.000$), age of disease onset, and disease duration ($p < 0.000$). In the group of relatives caring for adults, these figures were significantly higher.

Severity of psychopathological symptoms in the RA and RC groups

The results of a comparative analysis of the severity of psychopathological symptoms (according to the SCL-90-R method) in the RC group, RA group, and a group of people exposed to chronic psychotraumatic events (refugees) are presented in Table 1.

A significant similarity was found in the incidence of psychopathological symptoms noted by relatives, and the level and range of manifestations of symptoms was comparable with that of refugees. Thus, the studied samples did not have differences in the indicators of interpersonal sensitivity, depression, anxiety, hostility, paranoid ideation, global severity index, and positive symptom total.

The results obtained indicate the similarity of the compared groups in terms of mental distress.

Feelings of bodily dysfunction associated with exposure to stress (indicator SOM) were comparable in the RA group, but were significantly less pronounced in the RC group when compared with the refugee group. For the RA group, the SOM indicator did not have significant differences when compared with that in the refugee group.

Compared with the RC group, the RA group had various obsessions (indicator OC). Moreover, the

result on this scale in the RA group did not differ from that in the refugee group.

Avoidance behavior associated with phobic experiences was most pronounced in the refugee group, followed by the RA group. To the least extent, such experiences and behaviors were characteristic of parents taking care of children with epilepsy. The desire for interpersonal isolation was significantly higher in the refugee group than in the RC group and comparable with that in the RA group.

The highest severity of symptomatic distress when comparing the studied groups was detected in the RC group. The indicator of psychological distress in this group exceeded the values detected in in both the RA group and refugee group.

Thus, the results obtained indicate a high level of distress in the RA and RC groups. The severity of distress was comparable to the degree of distress experienced by people who were objectively in a difficult life situation. In the refugee group, the

Table 1 / Таблица 1

Means (Standard Deviations) and Mean Comparisons of Symptom Checklist-90-Revised (SCL-90-R) subscale in groups of informal caregivers of patients with epilepsy and group of refugees

Соотношение средних значения показателей методики Symptom Checklist-90-Revised (SCL-90-R) групп родственников, опекающих детей и взрослых, страдающих эпилепсией, и группы беженцев

SCL-90-R subscales / Показатели SCL-90-R	RA / PB (n = 18)		RCH / РД (n = 44)		Refugees / Беженцы (n = 53)		p
	M	SD	M	SD	M	SD	
Somatization (SOM) / Соматизация (SOM)	0.71	0.57	0.55	0.6	0.85	0.73	0.002 ³
Obsessive-Compulsive (O-C) / Обсессивно-компульсивные расстройства (O-C)	0.9	0.39	0.53	0.61	0.68	0.63	0.003 ¹
Interpersonal Sensitivity (INT) / Межличностная чувствительность (INT)	0.66	0.43	0.62	0.55	0.76	0.68	–
Depression (DEP) / Депрессия (DEP)	0.67	0.46	0.83	0.79	0.67	0.62	–
Anxiety (ANX) / Тревожность (ANX)	0.6	0.48	0.77	0.76	0.58	0.58	–
Hostility (HOS) / Враждебность (HOS)	0.51	0.38	0.82	0.62	0.59	0.75	–
Phobic Anxiety (PHOB) / Фобическая тревожность (PHOB)	0.18	0.17	0.14	0.29	0.30	0.37	0.031 ¹ , 0.025 ² , 0.001 ³
Paranoid Ideation (PAR) / Паранойяльные симптомы (PAR)	0.48	0.4	0.51	0.6	0.64	0.53	–
Psychoticism (PSY) / Психотизм (PSY)	0.22	0.27	0.16	0.17	0.30	0.42	0.000 ³
Global Severity Index (GSI) / Общий индекс тяжести симптомов (GSI)	0.53	0.31	0.55	0.5	0.60	0.51	–
Symptom Distress Index (PSDI) / Индекс наличного симптоматиче- ского дистресса (PSDI)	1.22	0.19	1.71	0.55	1.45	0.46	0.003 ¹ , 0.001 ² , 0.003 ³
Positive Symptom Total (PST) / Общее число утвердительных ответов (PST)	39.14	22.43	26.56	17.72	32.13	21.88	–

Note. RA — relatives of adults diagnosed with epilepsy; RCH — relatives of children diagnosed with epilepsy; M — mean; SD — standard deviation. ¹Statistically significant differences between the RA and RCH groups; ²statistically significant differences between the RA and Refugee groups; ³statistically significant differences between the RCH and Refugee groups. *Примечание.* PB — родственники взрослых с диагнозом эпилепсия; РД — родственники детей с диагнозом эпилепсия; M — среднее; SD — среднеквадратическое отклонение. ¹Статистически значимые различия между группами PB и РД; ²статистически значимые различия между группами PB и Беженцы; ³статистически значимые различия между группами РД и Беженцы.

level of psychological stress was associated with the need to adapt to the unhabituated conditions of life in a new environment and, in some cases, with the presence of negative traumatic life experience. This group is similar to the studied samples of relatives of patients in terms of duration, that is, the chronic nature of stress. Attention is drawn to the predominance of symptomatic distress in relatives of sick children.

World assumptions in the RA and RC groups

The results of a comparative analysis of attitudes toward oneself and the environment (according to the WAS method) in the RC group, RA group, and control group are presented in Table 2.

In the studied groups (Table 2) of relatives of patients, no differences were found in WAS indicators. Moreover, according to the benevolence of the impersonal world, self-worth, and luck scales in the RA and RC groups, the indicators were significantly higher than those in the reference group. The results obtained indicated a certain idealization of the world and oneself by relatives taking care of patients with epilepsy. Both the RA and RC groups were characterized by declaring the benevolence of the world and the value of their personality and luck.

In addition, compared with the reference group, the RC group had very low scores in the justice scale. From our point of view, this may indicate the inconsistency in the system of basic beliefs of par-

ents. Such inconsistency lies in the fact that along with their value and luck and the sense of the kindness of the world around them, they have an idea of its injustice. An alternative interpretation of the described configuration of average group assessments is the hypothesis about the projection of one's sense of the world injustice onto others. In other words, the world is imperfect, but its imperfection does not affect the respondents personally.

In the RA group, the self-controllability scale was dissonant, as the scores on its indicators were lower than those in the reference sample. The internal sensation of personal value and good fortune in a generally benevolent (sometimes idealized) world turned out to be poorly controlled for such relatives.

Perception of family relationships in the RC and RA groups

The results of the analysis of the perception of the family situation in the RA and RC groups (according to the FES method) are presented in Table 3.

The scores on the conflict and moral-religious emphasis scales were significantly higher in the RC group than in the RA and control groups. Compared with the reference group, the RC group had a higher indicator on the expressiveness scale and lower one on the independence scale, whereas in the RA group, no significant differences were found when compared with the reference group.

Table 2 / Таблица 2

Means (Standard Deviations) and Mean Comparisons of World Assumption Scale (WAS) subscale in groups of informal caregivers of patients with epilepsy and group of control

Соотношение средних значения показателей по Шкале базисных убеждений (ШБУ) групп родственников, опекающих детей и взрослых, страдающих эпилепсией, и группы нормативного контроля

WAS subscales / Показатели ШБУ	RA / PB (n = 18)		КСП / РД (n = 44)		Control group / Группа контроля (n = 201)		p
	M	SD	M	SD	M	SD	
Benevolence of the Impersonal World / Доброжелательность окружающего мира	37.10	7.040	35.20	5.870	31.9	5.1	0.016 ¹ 0.000 ²
Justice / Справедливость	22.30	2.890	21.10	4.700	22.6	3.6	0.039 ²
Self-Worth / Образ Я	31.30	3.850	31.60	4.650	25.2	3.2	0.000 ¹ 0.000 ²
Luck / Удача	34.20	5.360	32.00	7.800	27.3	3.3	0.000 ¹ 0.000 ²
Self-controllability / Убеждения о контроле	26.80	3.320	28.00	4.160	29.9	3.6	0.001 ¹

Note. RA — relatives of adults diagnosed with epilepsy; RCH — relatives of children diagnosed with epilepsy; M — mean; SD — standard deviation. ¹Statistically significant differences between the RA and control group; ²statistically significant differences between the RCH and control groups. *Примечание.* PB — родственники взрослых с диагнозом эпилепсия; РД — родственники детей с диагнозом эпилепсия; M — среднее; SD — среднеквадратическое отклонение. ¹Статистически значимые различия между группами PB и группой контроля; ²статистически значимые различия между группами РД и группой контроля.

The RA group had lower scores on the active-recreational orientation and control scale than the RC group and the reference group.

In the RC group, the picture of perception turned out to be largely predictable, and it was characterized by frequent quarrels and conflicts and a tendency to express dissatisfaction openly in interpersonal relationships, and this was at a rather high level of family cohesion. According to the respondents, the orientation of family relations is determined by the desire to restrain the personal activity and independence of family members, combined with an orientation toward moral normativity.

In the RA group, quarrels and conflicts did not occur more often than in the reference group. The desire for outdoor activities significantly decreased, and they had a feeling of weakness in control.

The results of comparing the RA and RC groups that differ in age of the patients, associated with

lower scores on the scales conflict, active-recreational orientation, moral-religious emphasis, and control, suggest the presence of certain fatigue and asthenia, which characterizes the atmosphere of family interactions with relatives of adult patients. Moreover, the cross-sectional study design, rather than a longitudinal one, makes us consider this assumption only as a hypothesis that requires additional empirical verification.

Relationship between the severity of psychopathological symptoms and the perception of family relationships by relatives caring for patients with epilepsy

The relationship between the severity of psychopathological symptoms, basic beliefs, and perception of family relationships by the RA and RC groups was examined using a correlation analysis of the indicators of the SCL 90-R, WAS, and FES methods.

Table 3 / Таблица 3

Median (Interquartile Range) Median Comparisons of Family Environment Scale (FES) subscale in groups of informal caregivers of patients with epilepsy and group of control

Сравнение центральных тенденций показателей по Шкале семейного окружения (ШСО) групп родственников, опекающих детей и взрослых, страдающих эпилепсией, и группы нормативного контроля

FES subscales / Показатели ШСО	RA / PB (n = 18)		RCH / РД (n = 44)		Control group / Группа контроля (n = 100)		p
	Me	IQR	Me	IQR	Me	IQR	
Cohesion / Сплоченность	7	5.75– 8.25	7	6–8	7	6–8	–
Expressiveness / Экспрессивность	7	4–7	7	6–8	6	5–7	0.008 ³
Conflict / Конфликт	1.5	0–2.25	3	1–4.75	2	0–3	0.053 ¹ 0.010 ³
Independence / Независимость	5	3.75–6	4.5	4–5	5	4–6	0.050 ³
Achievement-orientation / Ориентация на достижения	5	4–6	5.5	4–6	5	4–6	–
Intellectual-cultural orientation / Интеллектуально-культурная ориентация	4	3.5–6	4	3–5	5	3–6	–
Active-recreational orientation / Ориентация на активный отдых	3	1.75–4	5	3–6	4	3–6	0.018 ¹ 0.054 ²
Moral-religious emphasis / Морально-нравственные аспекты	4	2.75–6	6	5–7	5	4–4	0.012 ¹ 0.000 ³
Organization / Организация	6	4.5–7	7	4–7	6	4–7	–
Control / Контроль	1	0–2.25	3	1.25–4	2	1–4	0.011 ¹ 0.048 ²

Note. RA — relatives of adults diagnosed with epilepsy; RCH — relatives of children diagnosed with epilepsy; Me — median; IQR — interquartile range. ¹Statistically significant differences between the RA and RCH groups; ²statistically significant differences between the RA and Control group; ³statistically significant differences between the RCH and Control group. Примечание. PB — родственники взрослых с диагнозом эпилепсия; РД — родственники детей с диагнозом эпилепсия; Me — медиана; IQR — межквартильный размах. ¹Статистически значимые различия между группами PB и РД; ²статистически значимые различия между группами PB и группой контроля; ³статистически значимые различия между группами РД и группой контроля.

As a significant similarity was revealed in both the explication of symptomatic manifestations and the perception of one's personality, surrounding world, and intrafamily interaction by the RA and RC groups, the relationships of these parameters were analyzed in the group including all relatives caring for patients with epilepsy (Table 4). The table presents only statistically significant correlations, with a significance level (p) of <0.05 . Since the SCL-90-R indicators do not have significant relationships with the expressiveness, conflict, independence, and organization (FES) scales, these scales were not included in the table.

The largest number of relationships (Table 4) was found between the scales of the SCL-90-R methodology and the WAS indicators, with all correlations being negative. Taking into account the results of a comparative analysis of the study groups according to the WAS method, it can be assumed that the declaration of kindness and benevolence of the surrounding world and one's attractiveness and luck in relatives caring for patients with epilepsy are associated with their demonstration of the absence of internal difficulties and problems. In other words, in relation to basic beliefs and psychopathological symptoms, the respondents tend to present pronounced facade tendencies. Facade tendencies were observed in both groups and affect various life situations associated with both the upbringing of sick children and care of adults with chronic illness. This may indicate the obviously protective nature of psychological attitudes by preventing the catastrophizing of the consciousness of the caring relatives. These protective attitudes, manifested in stable idealistic basic beliefs and suppression of symptoms of psychopathological distress, can act not only as a protective shield but also, apparently, play a role in a mobilizing psychological principle.

The negative correlations between the SCL-90-R symptomatic scales and the active-recreational orientation indicator (FES) probably indicate trends typical for parents of children with epilepsy. They consider overcoming the disease by unloading forms of social activity and participation in social life through superficial interactions that allow demonstrating the absence of restrictions associated with the child's illness and prevent stigmatization. The feeling of having a social life provides increased identification with problem-free (in terms of health) families.

Moreover, numerous positive correlations of the scales reflecting the psychopathological symptoms of SCL-90-R with the achievement-orientation indicator (FES) reflect the fact that stable competitive social relations among respondents are associated with ac-

tualization of fears, hostility, suspicion, and general severity of symptoms.

Thus, relatives of patients with epilepsy are ready to take part in public life, but do not want to enter into long-term complex competitive relationships.

Particular attention should be paid to the negative correlation between the intellectual-cultural orientation (FES) scale and the Symptom Distress Index PDSI (SCL-90-R), reflecting the understandable fact of reducing internal psycho-emotional stress due to switching attention to broad cultural aspects of life.

DISCUSSION OF RESULTS OBTAINED

The results of the analysis of the severity of psychological distress, basic beliefs, and perception of family relationships by relatives caring for both adults and children with epilepsy revealed a significant similarity in the explicitness of symptomatic manifestations in close patients and in their perception of their personality and the world around them, as well as intrafamily interaction.

In the literature, only one study included the simultaneous analysis of relatives caring for adolescents with epilepsy and relatives of adult patients [22]. The results of this study and the present study showed a significant similarity in the severity of the disease burden and a decrease in the quality of life in the majority of respondents.

Moreover, the authors of the aforementioned study defined the severity of the disease burden in this cohort as "mild to moderate," whereas data indicated that relatives caring for such patients have significantly different psychopathological symptoms, and the severity of symptomatic manifestations is significant and comparable to the severity of such disorders in people under chronic stress (refugees).

In addition, the results of the present study demonstrated that despite the significant similarity of the RA and RC groups in terms of mental distress, compared with the RC group, various obsessions are more common in the RA group, and the RC group showed more severe symptomatic distress.

Compared with RA group, the RC group's presentation of perception of family relations is characterized by more frequent quarrels and conflicts, a tendency to express dissatisfaction openly in interpersonal relationships, restraints of personal activities, and independence of family members, combined with an orientation toward moral standard. In the RA group, quarrels and conflicts do not occur more often than in the reference group. Moreover, they have decreased desire for outdoor activities and have a feeling of weakness in control in following family rules.

Table 4 / Таблица 4

Correlations between SCL-90-R, WAS and FES subscales in groups of relatives caring for patients with epilepsy
Корреляционные связи показателей Symptom Checklist-90-Revised, Шкалы базисных убеждений и Шкалы семейных отношений в группах родственников, опекающих пациентов с эпилепсией

Subscales / Показатели методик	SOM	O-C	INT	DEP	ANX	HOS	PHOB	PAR	PSY	GSI	PST	PDSI
Benevolence of the Impersonal World / Доброжелательность окружающего мира	-0.343**	-0.342**	-0.432**	-	-0.420**	-0.396**	-0.419**	-0.517**	-0.287*	-0.449**	-0.452**	-
Justice / Справедливость	-	-	-	-0.491**	-0.298*	-0.355**	-	-	-	-0.306*	-	-0.441**
Self-Worth / Образ «Я»	-0.327*	-0.622**	-0.589**	-0.383**	-0.683**	-0.401**	-0.444**	-0.546**	-0.627**	-0.587**	-0.634**	-
Self-Worth / Удача	-0.302*	-0.453**	-0.511**	-0.624**	-0.621**	-0.528**	-0.397**	-0.405**	-0.566**	-0.637**	-0.598**	-0.425**
Self-controllability / Убеждения о контроле	-0.407**	-0.316*	-	-	-	-	-	-	-	-	-	-0.337**
Cohesion / Сплоченность	-	-	-	-	-	-	0.269*	-	-	-	-	-
Achievement-orientation / Ориентация на достижения	-	-	0.303*	-	0.320*	0.265*	0.295*	0.357**	-	0.281*	0.341**	-
Intellectual-cultural orientation / Интеллектуально-культурная ориентация	-	-	-	-	-	-	-	-	-	-	-	-0.351**
Active-recreational orientation / Ориентация на активный отдых	-	-0.597**	-0.489**	-0.314*	-0.385**	-0.379**	-0.437**	-0.441**	-0.365**	-0.427**	-0.467**	-
Moral-religious emphasis / Морально-нравственные аспекты	-0.259*	-	-	-	-	-	-	-	-	-	-	-
Control / Контроль	-	-	-	-	-	0.309*	-	-	-	-	-	-

Note. * $p < 0.05$; ** $p < 0.01$. SCL-90-R subscales: SOM — Somatization; O-C — Obsessive-Compulsive; INT — Interpersonal Sensitivity; DEP — Depression; ANX — Anxiety; HOS — Hostility; PHOB — Phobic Anxiety; PAR — Paranoid Ideation; PSY — Psychoticism; GSI — Global Severity Index; PST — Symptom Distress Index; PDSI — Positive Symptom Total.
Примечание. * $p < 0,05$; ** $p < 0,01$. Показатели SCL-90-R: SOM — соматизация; O-C — обсессивность – компульсивность; INT — межличностная сензитивность; DEP — депрессия; ANX — тревожность; HOS — враждебность; PHOB — фобическая тревожность; PAR — паранойяльные тенденции; PSY — психотизм; GSI — общий индекс тяжести симптомов; PST — общее число утвердительных ответов; PDSI — индекс наличного симптоматического дистресса.

The reviewed literature describes various predictors of burden and psychological distress in caregivers of patients with epilepsy. The authors most often note factors such as the severity and frequency of seizures, early age at disease onset, presence of comorbid disorders, number of hours spent on caring for the patient and number of persons involved in care, attitudes toward epilepsy in the family, and presence of social support [9, 17, 18, 21].

In the present study, attention is focused on the analysis of the relationship between the severity of psychopathological symptoms, basic beliefs, and perceptions of family relationships in relatives caring for patients with epilepsy. The results suggest the importance of positive personal attitudes regarding oneself and the environment and a sense of inclusion in public life to maintain the normal mental functioning of the relatives caring for such patients.

The trends identified probably prevent stigmatization and psychological traumatization of relatives if a family member has an illness. An idealized internal representation of the surrounding world and one's personality and the demonstration of an external "facade" of well-being turn out to be significant for maintaining one's identity as relatives of patients with chronic illness.

CONCLUSION

The results help in identifying several polymorphic psychopathological symptoms in relatives caring for children and adults with epilepsy. The interrelations of psychopathological symptoms with the basic beliefs of the individual and the subjective perception of one's family relationships suggest the need to consider these parameters when developing individualized measures for relatives of patients with epilepsy. The axiological sphere of the personality of such relatives is characterized by hypernormativity, which has important protective functions, provides the ability to maintain a life perspective, prevents the appearance in the consciousness of signs of pronounced mental distress, catastrophizing of consciousness, and creates an intrapsychic basis for sociopsychological adaptation.

ADDITIONAL INFORMATION

Author contribution. Thereby, all authors made a substantial contribution to the conception of the study, acquisition, analysis, interpretation of data for the work, drafting and revising the article, final approval of the version to be published and agree to be accountable for all aspects of the study.

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Вклад авторов. Все авторы внесли существенный вклад в разработку концепции, проведение исследования и подготовку статьи, прочли и одобрили финальную версию перед публикацией.

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