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Importance of psychological functioning of family members as a factor of remission stability in affective disorder patients: a systematic review

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ABSTRACT

BACKGROUND: The biopsychosocial approach to understanding the etiology and pathogenesis of affective disorders predetermines the importance of studying the relationship of social and mental factors, including the patient's microsocial environment, and the course of disease.

AIM: This review analyzes data from literature related to the psychological traits of the patient's family environment and the relationship of these variables and indicators of the course of disease in affective disorders.

MATERIALS AND METHODS: This review uses PRISMA criteria and requirements. Systematic online search in Pubmed, Google Scholar, ScienceDirect and eLibrary databases, and manual search of articles.

RESULTS: The review includes 21 studies with a total of 3,166 respondents, including 2,320 patients and 846 family members. Patient distribution by diagnosis: bipolar disorder (65.90%), recurrent depressive disorder (20.52%), schizoaffective disorder (4.84%), other unspecified affective disorders (8.70%). Family member distribution by kinship: partners and spouses (57.1%), parents (20.2%), children (8.2%), siblings (1.9%), other relatives and family members acting as carers (12.6%). It was found that the nature of the patient's family functioning was an important factor in assessing the course of affective disorders. Five relatively independent research areas were found. They describe the relationship of microsocial environment phenomena and the course of affective disorders, including social integration and support of the patient, general family functioning, emotional expression, types of attachment in the family, and disease burden.

CONCLUSION: Further study of psychosocial factors in the context of the course of affective disorders appears to be a promising research area as it allows to identify important pathogenesis and sanogenesis aspects. There is a critical shortage of domestic research in this area, which is largely determined by the lack of psychognostic methods and evaluation technologies. Adaptation and development of such methods is important at the current development stage of clinical psychology.

Keywords: affective disorder; sleep disorder; remission; emotional expression; family burden; social support; family functioning; systematic review.

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Значение психологического функционирования родственников как фактора стабилизации ремиссий у больных с аффективными расстройствами: систематический обзор

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АННОТАЦИЯ

Обоснование. Биопсихосоциальный подход в понимании этиопатогенеза аффективных расстройств определяет важность изучения связи между социально-психологическими факторами, в частности характеристиками микросоциального окружения больного, и течением заболевания.

Цель. Анализ литературных данных о психологических характеристиках семейного окружения больного и связи этих переменных с показателями течения болезни при аффективных расстройствах.

Материалы и методы. При проведении обзора применяли критерии и требования PRISMA. Проводили систематический электронный поиск в базах данных Pubmed, Google Scholar, ScienceDirect и eLibrary, а также ручной поиск статей.

Результаты. В обзор отобрано 21 исследование, включающее в общей сложности 3166 респондентов, из них 2320 пациентов и 846 родственников. Распределение по диагнозам пациентов было следующим: 65,90% — биполярное аффективное расстройство, 20,52% — рекуррентное депрессивное расстройство, 4,84% — шизоаффективное расстройство, 8,70% — другие неуточнённые аффективные расстройства. Распределение родственников по характеру родства: 57,1% — партнёры и супруги, 20,2% — родители, 8,2% — дети, 1,9% — сиблинги, 12,6% — другие родственники и опекающие близкие. Установлено, что особенности семейного функционирования больного являются важным фактором при оценке течения аффективных расстройств. Обнаружено 5 относительно автономных направлений исследований, описывающих соотношение феноменов микросоциального окружения с течением аффективных расстройств: изучение социальной интеграции и поддержки больного, общее семейное функционирование, эмоциональная экспрессия и типы привязанности в семье, бремя болезни.

Заключение. Дальнейшее изучение психосоциальных факторов в контексте течения аффективных расстройств представляется одним из перспективных направлений исследований, поскольку позволяет раскрыть важные аспекты пато- и саногенеза. Наблюдается острая нехватка отечественных исследований в данной области, которая во многом определяется дефицитом психодиагностических методов и технологий оценки. Адаптация и разработка таких методов является важной задачей современного этапа развития клинической психологии.

Ключевые слова: аффективное расстройство; расстройство сна; ремиссия; эмоциональная экспрессивность; бремя семьи; социальная поддержка; семейное функционирование; систематический обзор.

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Аффектив тайпылышлы авыруларда ремиссияларне тотрыкландыру факторы буларак туганнарның психологик яшәешенең әһәмияте: системалы күзәтү

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АННОТАЦИЯ

Нигезләү. Аффектив тайпылышларның этиопатогенезын аңлауда биопсихосоциаль якин килү социаль-психологик факторлар, аерым алганда авыруның микросоциаль даирәсе характеристикалары һәм авыруның барышы арасындагы бәйләнеше өйрәнүнең мөһимлеген билгели.

Максат. Авыруның гаилә тирәлегенә психологик характеристикалары һәм бу үзгәрешләрнең аффектив тайпылышлар вакытында авыру барышы күрсәткечләре белән бәйләнеше турындагы әдәби мәгълүматларга Анализ ясау.

Материаллар һәм методлар. Күзәтү үткәргәндә PRISMA критерийларын һәм таләпләрен кулланганнар. Pubmed, Google Scholar, ScienceDirect һәм eLibrary мәгълүмат базаларында системалы электрон эзләү, шулай ук мәкаләләрне кулдан эзләү үткәрделәр.

Нәтижә. Күзәтүгә барлыгы 3166 респондентны үз эченә алган 21 тикшеренү сайлап алынган, шуларның 2320се пациентлар һәм 846 туганнары. Диагноз буенча бүленеш түбәндәгечә иде: 65,90% — биполяр аффектив тайпылыш, 20,52% — рекуррент депрессив тайпылыш, 4,84% — шизоаффектив тайпылыш, 8,70% — башка аныкланмаган аффектив тайпылышлар. Туганлык характеры буенча туганнар бүленеше: 57,1% — партнерлар һәм ир белән хатын, 20,2% — ата — аналар, 8,2% — балалар, 1,9% — сиблинглар, 12,6% — башка туганнар һәм кайгыртучы якынар. Авыруның гаилә эшчәнлегә үзгәрешләргә аффектив тайпылышлар барышын бәяләгәндә мөһим фактор булып тора. Микросоциаль әйләнә-тирәлек феноменнарының аффектив тайпылышлар барышы белән нисбәтен тасвирлаучы 5 автоном тикшеренү юнәлеше ачыкланды: авыруның социаль интеграциясен һәм ярдәм өйрәнү, гомуми гаилә эшчәнлегә, эмоциональ экспрессия һәм гаиләдәге бәйләнеш типлары, авыруның авырлыгы.

Нәтижә. Аффектив тайпылышлар агымы контекстында психосоциаль факторларны алга таба өйрәнү тикшеренүләрнең перспективасы юнәлешләренә берсе булып тора, чөнки ул пато — һәм саногенезның мөһим аспекты ачарга мөмкинлек бирә. Бу өлкәдә илбездә тикшеренүләрнең кискен житешсезлегә күзәтелә, ул күп очракта психодиагностик методлар һәм бәяләү технологияләре кытлыгы белән билгеләнә. Мондый методларны җайлаштыру һәм эшләү клиник психология үсешенә хәзерге этабында мөһим бурыч булып тора.

Төп сүзләр: аффектив тайпылыш; йокы тайпылышы; ремиссия; эмоциональ экспрессивлык; гаилә йөге; социаль ярдәм; Гаилә эшчәнлегә; системалы күзәтү.

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BACKGROUND

According to the World Health Organization [1], affective disorders (ADs) are currently the most frequently identified pathology in psychiatry. This type of pathology is a broad group of mental disorders associated with emotional disorders of varying severity, affective and mental activity disorders, a variety of sleep and wakefulness disorders. According to ICD-10, this group includes bipolar affective disorder (BAD), recurrent depressive disorder (RDD), manic and depressive episodes, chronic mood disorder, and other unspecified ADs [2]. The disease is characterized by a high risk of mortality, including suicide and somatic comorbidities [3]. Interpersonal relationships of patients with ADs are often significantly affected during both mania and depression [4–6].

Pharmacotherapy is currently considered the leading method in the treatment of ADs, but does not always lead to complete resolution of symptoms and stable remission in such patients. Thus, up to 70% of patients with ADs have relapses within two years after an acute episode, and at least 50% experience symptoms of affective disorders between episodes [7–9].

Studies reflect a multifactorial etiology of ADs, suggesting a complex interdependence of genetic, biological, and psychosocial components. The current understanding of the etiopathogenesis of these diseases, carried out through the biopsychosocial approach, determines the importance of studying the relationship between biological vulnerability and environmental influences, in particular, socio-psychological stressors and disease cycles.

Numerous studies combined in systematic and meta-analytic reviews demonstrate the detrimental impact of family dysfunctionality on the formation of children's and adolescents' affective domain. For example, significant determinants of depressive symptoms in adolescents include intrafamilial, including hidden, parental conflicts, low family cohesion, subjectively perceived by the adolescent parental psychological control and critical attitude, low level of perceived family support, and the feeling of lack of parental warmth [10–12].

Studies focusing on families of adult patients are much less common. At present, the Russian and foreign literature provides no systematic reviews devoted to the search and systematization of data on the duration and depth of remission in the context of their association with individual-psychological characteristics, behavior, mental state and family functioning of relatives involved in the care of adult patients with ADs.

The review aimed to fill an existing gap in summarizing information on the psychological characteristics of the family environment of a patient with AD and the association of these variables to their psychopathological status.

MATERIALS AND METHODS

Our review was guided by PRISMA criteria and requirements [13].

Components guiding the study search and selection strategy are as follows: 1) patient population or diseases considered; 2) interventions or exposures; 3) reference group; 4) outcome or endpoint; 5) study design. For the present review, respectively: 1) patients with AD aged 18 years and older, as well as persons aged 18 years and older who are caregivers for a family member with AD; 2) the study should include a clear description of diagnostic procedures and study methods, psychotherapeutic or psychoeducational interventions if available; 3) no limitations; 4) data on the psychopathological status of patients with AD (both during relapse and remission) and its association with individual psychological characteristics, behavior, mental state and family functioning of caregivers; 5) descriptive/observational/interventional (population-based cross-sectional studies, longitudinal population-based cross-sectional studies, randomized, non-randomized, prospective, retrospective), exclusion: individualized studies (clinical cases); methods: quantitative/qualitative/mixed methods.

Additional inclusion criteria were the language of publication (Russian, English) and type of publication (full-text, except for interviews and systematic literature reviews).

Study search and selection strategies

Two search strategies were used in the review. First, specific keywords were used for a systematic electronic search in the following four databases: Pubmed, Google Scholar, ScienceDirect and eLibrary.

The search used combinations of words from four categories: 1) relatives: caregiver, informal caregivers, carer, family caregiver, family, spouse, relatives, significant others; 2) nosology: affective disorders, bipolar disorder, depression, sleep disorders, sleep disturbance, insomnia; 3) psychological functioning: psychological functioning, mental state, personality traits, personal characteristics, characterological features, psychological characteristics, personality attitudes, beliefs, values, family functioning, family interaction, quality of life, psychological well-being, burden, burnout, psychopathological symptoms; 4) relapse: relapse; 5) remission: remission, persistence of remission, recurrence of remissions, stabilization of remissions, depth of remission, prognosis for remission, predictors, protectors, predictors of remission, protectors of remission, successfully maintains remission, long-term remission.

Both combinations of the above English and Russian words were used for the eLibrary search: 1) relatives, family, spouses, wives, husbands, significant others; 2) affective disorders, bipolar disorder, bipolar affective disorder, BAD, manic-depressive disorder, manic-depressive psychosis, MDD, cyclothymia, depression, hypomania, dysphoria, dysthymia, sleep disorders, insomnia; 3) psychological functioning: mental state, personality traits, personality characteristics, characterological features, psychological features, personality attitudes, beliefs, values, family functioning, family interaction, family factors, quality of life,

psychological well-being, burden, burnout, psychopathological symptoms; 4) relapse; 5) remission, persistence of remission, remission stabilization, depth of remission, prognosis for remission, predictors, protectors, predictors of remission, protectors of remission.

All articles published before April 2024 were selected. The second strategy was manual search of articles by relevant references in the reference lists of the analyzed sources.

RESULTS

A total of 548 articles were identified from electronic databases and manual searches. After applying the selection criteria, 21 articles were included in the review (Fig. 1).

Of the 21 studies, 6 were cross-sectional, 7 were classified as randomized controlled studies, 6 were prospective studies, and 2 were longitudinal studies. The largest number (9) of publications were by authors from the USA [14–22], two each from Spain [23, 24], Russia [25, 26], the Netherlands [27, 28], one each from Turkey [29], India [30], the UK [31], Germany [32]. Two collaborative projects were also presented in publications [33, 34].

Main socio-demographic and clinical characteristics of the study subjects

The total number of respondents who participated in the analyzed studies was 3,166, including 2,320 patients and 846 relatives. Patients and their relatives were studied together in 9 studies, while 12 studies studied patients alone. No publications devoted exclusively to the study of relatives were found.

The mean age of the patients was 40.99 years (SD =11.78); one study was not included in the calculation of mean age and standard deviation because the patients' age was not specified [25]. Nineteen papers report the gender ratio of patients in the sample. Based on the data presented, the majority of patients were women (60%). Patients in the analyzed studies were distributed by diagnoses as follows (data was translated from English according to the International Statistical Classification of Diseases and Related Health Problems, ICD-10): 65.90% with BAD, 20.52% with RDD, 4.84% with schizoaffective disorder, 8.70% with other affective disorders, not specified by the authors. Despite the fact that schizoaffective disorders according to ICD-10 are referred to the schizophrenic spectrum pathology, a pronounced affective component, in our opinion, allows attributing this group of patients to the population with affective disorders considered in this article.

The relatives' age was controlled only in four studies [19, 24, 28, 32], with a mean age of 48.38 years (SD=13.2). The ratio of relatives by gender could not be found in most of the studies reviewed. The nature of relationship was indicated in seven publications reviewed [16, 17, 22, 24, 28, 32, 34], which included 525 relatives. By nature of relationship, the distribution was as follows: 57.1% were partners and spouses, 20.2% were parents, 8.2% were children, 1.9% were siblings, and 12.6% were other relatives and caregivers.

Nine studies included follow-up examinations of patients, three of which included follow-up examinations of relatives. The follow-up evaluation studies included 1,193 respondents at the time of the first evaluation and 1,021 respondents at the time of the second evaluation, the number of relatives in the first and subsequent evaluations being 417 and 347, respectively.

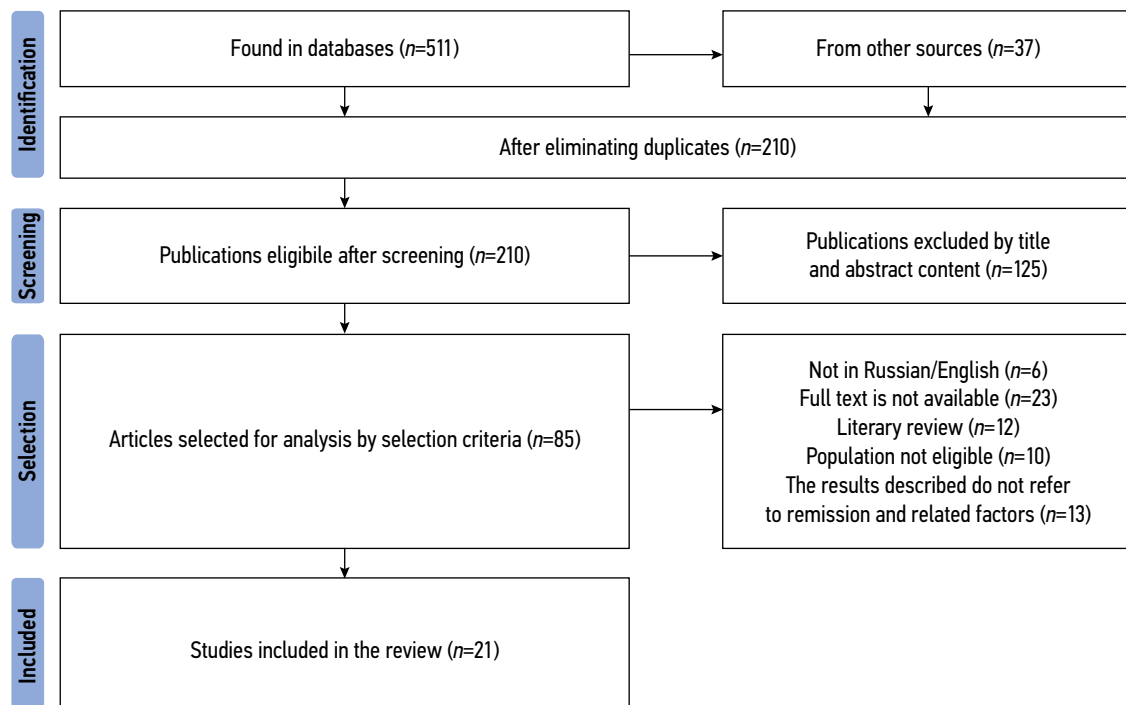


Fig. 1. Article selection stages.

Observed phenomena of family functioning related to the psychopathologic status of patients with ADs

When analyzing the studies included in the review, 5 areas were identified, which, despite the overlap of topics, can be considered as independent vectors in the studying of the association between family functioning, remission formation and prognosis of relapses in patients with ADs. In describing these areas, we will first present the topics of studies regarding the family in a broader social context, then move on to general family functioning, and then to specific aspects of family relationships associated with remission/relapse in these patients.

Family as a supportive social system

Modern researchers use the social network model as one of the popular theoretical models that determine the direction of research in the social functioning of patients with ADs [35]. This area studies the structure, number and frequency of social contacts, size and density of social interaction networks. Another important parameter under study is the level of social support, defined as the function and quality of social contacts. In particular, the perceived availability of care and the support actually received by the patient are analyzed. This considers emotional, cognitive and practical social support as the main components of social support.

Through the social network model, the family is considered by researchers in a broad sense and defined as a group of individuals connected by cohesive relationships [36].

Various specialized methods are used to determine the social network of an AD patient, including ego-centered social network analysis [36], various social network assessment scales (e.g., Social Network Scale, SNS) [37], and self-assessment questionnaires, aimed at diagnosing the patient's perceived social support, such as the Interpersonal Support Evaluation List (ISEL) or The Multidimensional Scale of Perceived Social Support (MSPSS) [21, 29].

The studies related to the social networks show that the improvement of quality of life and personal functioning in patients with ADs is associated with the number, availability and frequency of trusted contacts, the patient's inclusion in family relationships, as well as the patient's subjective satisfaction with interpersonal relationships and social support [21, 26, 29, 30, 37]. At the same time, lack of inclusion in social interaction and stigmatization are predictors of incomplete remission and high frequency of hospitalizations in such patients [25, 29].

Ezquiaga et al. [23] found out that depressed patients who received more emotional support from their partners were more likely to be in remission at 6 months of follow-up. Meanwhile, the impact of emotional support from partners was not significant in terms of remission after 12 months [33].

The researchers hypothesized that these results may be due to differences in sample characteristics, treatment conditions, and other variables.

In Weinstock and Miller's study [21], none of the psychosocial characteristics were predictors of manic symptoms, whereas low social support was a predictor of depression during one year of follow-up.

Miklowitz et al. [17] obtained similar data. The authors note that family support acts as a protector against depressive symptoms in BAD and RDD, but the role of family support in manic relapse remains unclear.

Thus, microsocial factors can be considered as predictors of depressive but not manic states. In addition, the dependence of the predictive power of microsocial characteristics on the time of the end of the previous disease relapse should be noted. In this regard, it should be noted that social support is more important in the early stages of remission (up to 6 months) than in later periods.

According to the analysis of studies of characteristics of social integration of patients with ADs, it is the satisfaction with the family members' support that is crucial for the patient. The study of factors mediating the relationship between symptoms, social integration and social support in patients with ADs seems important in the prevention and reduction of social isolation and self-isolation characteristic of this category of patients in the depressive period.

General family functioning

A number of researchers studied the association between the AD course and the functioning of the patient's family system. Family functioning is generally understood as the fulfillment by family members of certain functions and responsibilities aimed at achieving the goals of a particular family [38]. Both clinician-performed objective observation methods (e.g., McMaster Clinical Rating Scale, MCRS) [15] and self-assessment questionnaires to assess family members' perceptions of family relationships are used to measure family functioning parameters. The General Functioning subscale of the Family Assessment Device (FAD-GF) [15, 21] was most often used as such a questionnaire in the analyzed studies.

According to Keitner et al. [15], who studied the family functioning of patients with depressive disorders, patients from dysfunctional families were characterized by worse recovery rates (in particular, greater severity of depressive symptoms) compared to patients with less impaired family functioning. Role functioning, affective engagement, and behavioral control were of particular importance. The authors note that families showed improvement in family functioning during treatment, but this progress was not smooth or sustained.

In contrast to the above, in the study of Weinstock and Miller [21], general family functioning had no predictive value with respect to the recurrence of depressive symptoms in patients within a year.

Thus, some inconsistency in the data regarding the association between general family functioning and depression severity can be noted. It is noteworthy that Keitner et al. caution against a direct causal interpretation of the data on the association between general family functioning and disease course parameters. The data obtained do not show clearly what contribution the disease makes to the impairment of family functioning, i.e., whether the severity of symptoms determines greater dysfunctionality of relationships or whether disturbed family relationships contribute to more pronounced psychopathology manifestations.

Role of expressed emotion and attachment nature

A separate line of studies, including a significant number of papers included in this review, is devoted to the association of the frequency and severity of relapses, as well as the severity of symptoms between episodes with one of the aspects of family functioning of patients with AD, namely with the so-called emotional expression (EE).

Due to the significant prevalence of studies of EE and the specificity of the construct under study, we will consider it in greater detail.

The concept of EE emerged in the 1950s as a result of observing families of schizophrenic patients. English researcher G. Brown and his colleagues noticed that the living conditions of patients after discharge significantly affects the occurrence of relapse. Relapses were significantly more likely to develop in patients who were returned to their families compared to those who were reintegrated into public institutions.

Currently, there are many definitions of EE. For example, one of the originators of the concept Vaughn [39] refers to EE as an indicator of the “emotional temperature” in the family, that is, of the intensity and nature of the family members' emotional reaction towards the patient. At the same time, the author notes that the attitude itself has polarity, which is revealed either in the absence of attachment (rejection of the patient) or in the excessive obsessive involvement of relatives in his/her life (emotional overinvolvement). EE includes a number of other destructive (contributing to relapse) behavioral patterns, including, in particular, criticism and hostility towards the patient.

Various tools have been developed to diagnose EE, with the Chamberwell Family Interview (CFI) being the classic method [40, 41]. This method is a semi-structured interview in which the caring relative is interviewed about the patient and his/her symptoms in the months preceding deterioration and/or hospitalization. The interview usually takes about 30 min and is audio recorded and then coded (the coding takes about 45 min). Five domains are coded: emotional overinvolvement, criticism and hostility are seen as contributing to increased EE, while positive comments and expressions of warmth are seen as leading to decreased EE.

The method is effort- and time-consuming. Although this method is considered the gold standard, only 2 studies using it are presented in this review [16, 20].

In three studies [22, 28, 32], the German version of the Five-Minute Speech Sample (FMSS) [42] was used to examine the association of EE with relapse rates. The FMSS is a simpler and shorter tool for measuring EE, which shows a high degree of consistency with the CFI results. The caregiving relative is asked to talk about his/her thoughts and feelings regarding the patient for 5 minutes, without interruption. The interview is recorded and coded. Coding usually takes about 20 minutes. The shortcomings of the method include the fact that it only assesses aspects related to emotional overinvolvement and criticism of the patient.

The Family Attitude Scale (FAS) [43] and Perceived Criticism Measure (PCM) self-questionnaires, designed to assess the intensity of perceived criticism and emotional response to it on the part of both relatives and the patient, were used in the studies as alternative interviewing tools for EE assessment [44]. FAS was used in one study [34] and PCM was used in four studies [18, 31, 32, 34].

Analysis of the articles included in this systematic review showed that EE acts as a predictor of relapses in AD patients in most studies [20, 22, 28, 31, 34]. An exception is the paper by Kronmüller et al. [32], who studied the association between EE and the long-term course of depression (the total follow-up period was 10 years) and found no significant prognostic correlations. The authors indicate the need to investigate factors that may partially mediate the effect of EE on the long-term course of depression, in particular suggesting that the prognostic significance of EE is higher for patients with BAD and remains unclear for patients with RDD.

In a number of studies, the family level of EE and patients' subjective assessment of the severity of criticism from relatives were not directly related to the time to relapse and the presence of AD symptoms in patients at follow-up [16, 18]. At the same time, the authors note that patients with a high family level of EE reported a higher level of depression, regardless of treatment conditions, and the severity of the patient's subjective distress in response to criticism from relatives determined the greater severity of depressive and manic symptoms and a smaller number of lucid intervals during the year.

It is noteworthy that Miklowitz et al. [18] showed that subjective assessment of relatives' distress in response to patient criticism (PCM) was negatively correlated with patients' scores on the Montgomery–Åsberg Depression Rating Scale (MADRS) [45], as well as with patients' scores on the Beck Depression Inventory-II (BDI) [46] at follow-up. The stronger the relatives experienced negative feelings in response to the patient criticism, the less pronounced were the depressive symptoms in the latter.

According to Scott et al. [31], the patient's perceived criticism from relatives can be a simple and reliable clinical

predictor of AD relapse. High levels of perceived criticism, poor understanding of disease features by relatives, and suboptimal compliance are risk factors for re-hospitalization of patients with BAD.

Simoneau et al. [20] note the association of EE with the general family communicative style (predominance of negative/positive verbal and nonverbal interactions) and emphasize the importance of nonverbal interaction with other people to harmonize the mental state of patients with AD. Patients who experienced an increase in nonverbal engagement in interactions with spouses or parents during treatment had less AD symptom severity after one year of follow-up. In this regard, the authors point out the importance of encouraging patients to use nonverbal components in interpersonal interactions (e.g., making eye contact, use of facial expressions and pantomimic expressions).

Data regarding the association of EE with the emotional focus of affective episodes are contradictory. While some studies consider EE parameters (in particular, critical comments and emotional overinvolvement) as predictors of both higher levels of mania and depression in AD patients at follow-up [16, 18], others consider EE parameters to be predictors of depressive phases only to a greater extent [22, 34].

Importantly, the study of EE in families of AD patients is often conducted as part of psychotherapeutic, particularly psychoeducational, programs. The authors are almost unanimous in noting the effectiveness of such programs for EE correction in families.

Another significant aspect of intrafamily interaction, which is closely related to EE and psychopathological status of AD patients, is the nature of attachment [27, 47].

The founder of attachment theory, Bowlby, in describing human psychosocial development, focused on the idea that people form stable patterns of interpersonal behavior by internalizing interactions with significant others (caregivers) in infancy [48]. These patterns are referred to as stable attitudinal (attachment) styles that subsequently affect a person's interpersonal behavior with significant others throughout life, especially in situations of giving or receiving help.

There are various methods for studying attachment in adults. The Experiences in Close Relationships questionnaire (ECR-R) [49] is one of the most popular and included in the study tool presented in this review.

Attachment patterns are related to emotion regulation processes and support seeking, which in turn may influence the development of ADs. For example, in a study of depressed patients, avoidant and anxious attachment types are considered by the authors as predictors of higher relapse rates and depression severity, while secure attachment type is described as a predictor of high remission duration, lower depression severity, and low relapse rates [27].

Family burden

Another important topic describing the subject of this review is the subjective experience of relatives of AD patients of the burden of the disease. The theoretical construct of burden is based on stress-oriented models to assess the impact of the chronic burden of having to care for an ill family member on the psychosocial functioning of their relatives [50].

Describing sources of distress in relatives of BAD patients, Reinares et al. [24] note that the most pronounced stress impact is associated with the patient's behavior, and the most disturbing manifestations of such behavior are hyperactivity, irritability, sadness and reticence of the patient. The relatives studied also indicated that they had significant concerns about the patient's social relationships and how the disease had affected their own emotional health and life in general. Relatives' fear of relapse stands out as a particular topic. Although the authors found no relationship between the number of previous episodes and the severity of subjective experience of burden, the level of burden was significantly higher in caregivers of BAD patients who had a relapse within the previous two years. According to the authors, the findings suggest that the burden is inversely proportional to the time interval from the last relapse.

It is noteworthy, however, that experience of family burden by a caregiving relative negatively affects the recovery of BAD patients in both the acute and stable phases of the disease [19]. Specifically, higher levels of subjectively experienced relatives' burden, measured 7 months after the initial episode, significantly increased the risk of a clinically significant episode in BAD patients in 15 months.

The Social Behavior Assessment Schedule (SBAS) [51] was used as a measurement tool to assess the severity of objective and subjective burden in the studies presented in this review.

DISCUSSION

The analysis of the studies presented in this review suggests that the peculiarities of the patient's family functioning have a significant prognostic value in assessing the AD course. Currently, there is a significant deficit of domestic studies of the role of psychosocial, in particular psychological, family factors in stabilizing remissions in such patients.

The studies described in this review are consistent with the widely presented in the literature position reflecting the importance of social integration and support of patients in the formation and stabilization of remission in AD [4, 5], with the interaction and assistance of the patient's family members playing the most important role among the forms of social support.

The literature presents research of a wide range of factors mediating the relationship between the patient's condition and forms of family interaction. Among such characteristics, first of all, we should note the expression of EE phenomena, disease burden, as well as characteristics of general family

functioning and types of attachment in the family, potentially associated with disease manifestation, relapse rate, and other parameters of AD course.

High EE values directly or indirectly acted as predictors of relapses in AD patients in a significant part of the analyzed papers [20, 22, 28, 31, 34]. The literature conceptualizes the high prognostic significance of EE in the context of the onset and development of disease in psychiatric patients (in particular, patients with schizophrenia and depression) [52–54]. At the same time, there is evidence of a significant culture-based causation of EE phenomena [55]. This imposes certain limitations in interpreting the results obtained and at the same time objectifies the potential vector of studies needed to clarify the ecological validity of the EE phenomenon in Russia.

Particular attention should be paid to differences in the predictive ability of microsocial factors in predicting manic and depressive symptoms in AD patients. Microsocial factors are more predictive of the occurrence of depressive but not manic states [17, 21, 22, 34]. Investigation of factors mediating the influence of family dynamics (in particular, type of course, disease phase, and time since last relapse) is important to better understand the family role in the pathogenesis of AD.

The association between the disease course, on the one hand, and such important psychological characteristics of the patient's immediate environment as temperamental features, character accentuations, mechanisms of psychological defense and coping, etc., on the other hand, remains understudied. Filling of the missing data seems to be a necessary area of AD studies, as it will allow not only to deepen the knowledge about the importance of microsocial factors in the etiopathogenesis of ADs, but also to specify the forms of socio-psychological work with patients and their relatives both during relapses and remission.

In recent decades, there has been an active growth of tools (technologies, methods, and techniques) to assess the microsocial interaction of patients with mental diseases (e.g., ego-centered social network analysis, Five-Minute Speech Sample (FMSS), Family Attitude Scale (FAS), Perceived Criticism Measure (PCM), etc.). Progress in this area seems promising, as it will allow a new level of addressing the challenges associated with the study of the role of the social environment at different stages of AD etiogenesis and recovery process. Since a significant number of methods have no analogs in Russian, the adaptation of existing tools and the development of new tools is one of the current objectives of clinical psychology.

In this paper, we deliberately refrained from analyzing the existing psychoeducational and other interventions for patients and their relatives (including those described in the articles presented in the review) but focused on psychological phenomena related to the AD course instead. The analysis of existing interventions is a separate objective that should be based on prior work to identify psychosocial targets


before developing specialized treatments for this population.

The limitations of the present study include the impossibility to ensure the completeness of coverage of all publications existing on the topic under study, in particular, due to the lack of access to full-text versions of articles. In addition, as noted above, some associations identified in the review (e.g., the association between the AD course and the family level of EE) should be interpreted with caution, based on the sociocultural context, and subjected to further verification as the body of empirical data grows.

CONCLUSION

A variety of biopsychosocial factors associated with the etiopathogenesis of ADs have now been identified. This review showed that, despite the strong evidence supporting the association between psychological characteristics of the microsocial environment and the AD course, further study of the nature of these associations, as well as the mediating factors, is required. There is a significant deficit of modern domestic studies, methods and technologies in this area. Despite the geographical diversity of the presented studies, the analyzed literature lacks verified data regarding the sociocultural features of the patient's microsocial environment (reflecting regional specificity) in the context of their association with the disease course. The lack of a unified psychodiagnostic toolkit prevents from performing comparative cross-cultural studies. Further integration of relatives into the system of treatment and rehabilitation measures in order to harmonize their daily interaction with patients (and thus prevent their unfavorable disease course) seems to be one of the essential tasks of modern healthcare.

ADDITIONAL INFORMATION

Appendix 1. A list of formalized research indicators highlighted in accordance with the selection criteria. 
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