Coping strategies of Bipolar patients' relatives: a narrative review.

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# ABSTRACT

The caregiving experience of a person with bipolar disorder is often characterized by feelings of powerless, hopelessness, and inability to change the situation. Relatives of patients with bipolar disorders have an extreme need to be supported in managing their family member's illness and to learn adaptive strategies to cope with the situation. In fact, they often report high levels of subjective and objective burden, restrictions in social life, a high risk to develop depressive or anxiety symptoms, financial and working difficulties, general global health problems, and a reduced quality of life.

Relatives develop different strategies to deal with patients' symptoms and behaviours, which are defined "coping strategies". A significant association between relatives' coping strategies and the long-term outcome of BD patients has been found.

The present paper aims to review available evidences on 1) coping strategies of relatives of patients with BD; 2) the efficacy of psychosocial interventions in the improvement of coping strategies of patients with BD. Papers' search was carried out using Pubmed, Scopus and Embase databases. A structured data extraction tool was created, and a list of categories was then identified. Papers were included in one of the categories according to research aims. The three categories are: 1) coping strategies of relatives of patients with bipolar disorder; 2) coping strategies of children of patients with bipolar disorders; 2) efficacy of psychosocial intervention in improving relatives coping strategies.

A total of 1365 papers were identified. By analyzing the abstract, 1334 papers were removed because they were either considered not relevant for the purpose of this review, or they were duplicates. The final list includes 14 papers. Moreover, maladaptive coping strategies, and especially emotion-focused coping strategies (i.e., avoidance and social isolation) have been identified as possible markers of bipolar illness in offspring of patients with BD. Finally, almost all studies assessing the efficacy of psychosocial interventions in improving relatives'

coping strategies, reported positive results. The findings of the present review highlight the importance to routinely provide PFI to patients and family members.

### RIASSUNTO

L'esperienza assistenziale di una persona con disturbo bipolare è spesso caratterizzata da sentimenti di impotenza, disperazione e incapacità di cambiare la situazione. I parenti dei pazienti con disturbi bipolari hanno un bisogno estremo di essere supportati nella gestione della malattia del loro familiare e di apprendere strategie adattive per far fronte alla situazione. In effetti, spesso riportano alti livelli di carico soggettivo e oggettivo, restrizioni nella vita sociale, un alto rischio di sviluppare sintomi depressivi o di ansia, difficoltà finanziarie e di lavoro, problemi generali di salute globale e una qualità della vita ridotta.

I parenti sviluppano diverse strategie per gestire i sintomi e i comportamenti dei pazienti, che sono definiti "strategie di coping". È stata trovata un'associazione significativa tra le strategie di coping dei parenti e l'esito a lungo termine dei pazienti con BD.

Questo contributo sintetizza le evidenze disponibili su 1) strategie di coping dei parenti dei pazienti con BD; 2) l'efficacia degli interventi psicosociali nel miglioramento delle strategie di coping dei pazienti con BD. La ricerca è stata effettuata utilizzando i database Pubmed, Scopus ed Embase.

#### INTRODUCTION

Bipolar disorder (BD) is a multidimensional condition, involving a complex and dynamic interaction between biological and psychosocial factors. Although pharmacotherapy is the first-line treatment for BD, available guidelines strongly suggest the provision of adjunctive psychosocial interventions to manage emotional and behavioural disturbances, during the course of the disease (Zaretsky, A, 2007 Canada). In fact, BD is associated with significant impairment in work, family and social life, beyond the acute phases of the illness (Dean, 2004).Patients with BD may experience severe disabilities in different domains of life, such as work, social activities and autonomy. Moreover, BD is also associated with higher mortality rates and causes high treatment costs and considerable emotional distress for patients and their families (Crump C 2013, Sweden; S. Leah 2003 USA; D.A. Perlick 2005, USA).In particular, it has been reported that the family context can have a significative influence on the course of the disorders, as it happens in the case of other severe mental disorders such as schizophrenia and major depression.

The caregiving experience of a person with bipolar disorder is often characterized by feelings of powerless, hopelessness, and inability to change the situation (Goossens et al., 2008; Jonsson et al, 2011). The effects on relatives of having a family member with a severe mental disorder have been extensively

described since mental health services became more community-oriented (Hoenig and Hamilton 1966; Fadden et al. 1987; Maurin and Boyd 1990; Xia et al, 2011; Sin et al, 2017; Fiorillo et al, 2015). While the earlier studies were primarily descriptive, later investigations have attempted to explore how a range of factors influence the experience of caring, such as expressed emotions, family burden and coping strategies (Chakrabarti & Gill, 2002). Several authors have reported that relatives of patients with BD present high levels of subjective and objective burden, restrictions in social life, a high risk to develop depressive or anxiety symptoms, financial and working difficulties, general global health problems and a reduced quality of life (McGirr et al, 2016; Hayes et al, 2016; Fiorillo et al, 2013; Van Der Voort et al, 2007; Luciano et al., 2015).

Relatives may develop different strategies to deal with patients' symptoms and disturbing behaviors, including both adaptive and maladaptive coping strategies. According to the general "stress-appraisal-coping" model developed by Lazarus and Folkman (1984), two patterns of relatives' coping strategies can be identified: problem- and emotion-focused strategies. The former refer to the adaptive effort to impact on stressful situations by using problem-solving and other cognitive personal resources (such as seeking for information about the disorder, using a positive communicative approach with the patient, finding support from friends, engaging in leisure activities; Chakrabarti & Gill, 2002). The emotion-focused coping strategies can be defined as the emotional reactions to patient's behaviors or symptoms and include avoidance, collusion, resignation and coercion (Jonsson et al, 2011). Relatives' coping strategies have been only recently recognized as mediators of long-term outcome of BP (Sampogna et al, 2018). In particular, when relatives adopt effective coping strategies to deal with patients' disturbing behaviours, patients can feel less stigmatized and stressed and report a reduced rate of relapses and hospitalization (Rea et al, 2003). Moreover, relatives coping strategies are closely linked to the level of family functioning, emotional involvement, and severity of patients' clinical status (Goossens et al, 2008) and the adoption of adaptive coping strategies can reduce the levels of family burden (Jonsson et al, 2011; Reinares et al, 2008; Reinares et al, 2010). Despite this, available evidences are still poor and to not allow to draw clear conclusions.

Based on these premises the present paper aims to review available evidences on 1) coping strategies of relatives of patients with BD; 2) the efficacy of psychosocial interventions in the improvement of coping strategies of patients with BD. Assessed papers report heterogeneous results regarding the adoption of caregivers' coping strategies. In fact, while some authors report that maladaptive coping strategies are most frequent in caregivers of patients with BD, others reported a slightly higher tendency of relatives to adopt problem-oriented coping strategies.

## METHODS

Papers' search was carried out using Pubmed, Scopus and Embase databases. The following terms were used to identify relevant articles: "coping", "caregiver", "relatives", "caregiver", "psychosocial intervention", "strategies", "family functioning". All These terms were matched with "bipolar disorder", "affective disorders", "outcome".

Papers were included in the review if they were: 1) written in English; 2) peer reviewed and carried out in adult psychiatric settings; 3) carried out only with relatives of patients with bipolar disorder; papers with mixed sample have been excluded; 4) published till March 2019. In order to identify other possible studies, references of selected papers were cross-checked.

A structured data extraction tool was created with headings including the year of publication, first author's name and country where the study was carried out, sample size, adopted methodology, study aims, primary outcomes and main results. A list of categories was then identified, and papers were included in one of the categories according to research aims. The three categories are: 1) coping strategies of relatives of patients with bipolar disorder; 2) coping strategies of children of patients with bipolar disorders; 2) efficacy of psychosocial intervention in improving relatives coping strategies. Papers were allocated in the different categories by four researchers independently. In case of disagreement between researchers, papers were discussed and re-analyzed with the presence of an expert researcher and then allocated into one of the categories, or removed from the review, if they did not fulfill inclusion criteria. Reviews, case reports, editorials, letters to the editor and other not research papers were removed.

The review is not intended to be systematic, but rather to shed light upon the use of coping strategies in bipolar disorder patients and their caregivers.

### RESULTS

### Papers' selection

A total of 1365 papers were identified. By analyzing the abstract, 1334 papers were removed because they were either considered not relevant for the purpose of this review, or they were duplicates. The final list includes 14 papers subdivided as follows: 5 papers in the "Relatives' coping strategies" category, 3 papers in the "Children of relative of patients with BD" category and 6 papers in the "Efficacy of psychosocial treatment" category.

## Coping strategies of relatives of patients with bipolar disorder

The 5 articles included in this category are listed in table 1. All of them are observational studies, with no randomized controlled trial (RCT).Articles included in this section provide an overview of coping strategies of relatives of patients with BP.

Pavlickova et al. (2014) focused on coping strategies of offsprings of Bipolar Patients. They confronted them with those of non-affected people, and reported that the two populations did not show significant difference in terms of coping strategies, apart from a moderate tendency towards lower active coping strategies in the group of people whose parents are affected with BD. Furthermore, they created two subgroups (affected and not affected children) reporting that the affected ones, compared to not affected and controls, have lower self-esteem, increased sensitivity to punishment and rumination.

Bridi et al. (2018) have reported similar results. In their study, 36 patients with BD, 39 of their first-degree relatives and 44 controls were included. They reported that both patients as well as their first-degree relatives reported greater use of maladaptive strategies in comparison to controls, including self-blame, venting, denial, self-distraction and behavioural disengagement. Moreover, Goossens et al (2008) reported, in a sample of 60 caregivers, a gender difference in the adoption of maladaptive coping strategies. In fact, male caregivers tended to report more frequently the self-distraction, being more engaged in activities that could divert them from patients' disturbing behaviours or to adopt avoidance behaviours, while female caregivers seemed to be less engaged in social activities and to seek less frequently social support from significant others. A gender difference in caregivers coping strategies has been reported also by Nehra et al, (2005) who found a significant association between female caregivers and the more frequent use of problem-focused strategies.

Differently from what reported by other authors, Groveret al. (2017) reported that relatives' coping strategies were associated with the longitudinal course of the disorder. In particular, more severe long-term course of the disorders was associated with better coping strategies (i.e., higher adoption of problem-focused coping strategies). Similarly, Chakrabarti et al. (2002) compared coping strategies of caregivers of patients with BD with those with Schizophrenia. Caregivers in both groups seemed to adopt adaptive, problem-focused strategies (such as positive communication, increasing social involvement of the patient, seeking information and talking with friends) more frequently than emotion-focused ones, (e.g., coercion, collusion, resignation and avoidance). Caregivers of patients with BD were more likely to use strategies such as positive communication and increasing social involvement of the patient. These results have been confirmed by Nehra et al (2005).

# Coping strategies of children of patients with bipolar disorders

Only three papers have been included in this category (Table 2). One of them is a randomized controlled trial (RCT) and the other two are observational (cross-sectional). Papers included in this category have assessed coping strategies as possible predictors of the onset of bipolar disorder children of patients with bipolar disorder, and/or as a potential target of intervention in adolescents with

early onset of bipolar disorder, in order to improve their levels of psychopathology.

Nijjar et al. (2014) and Jones et al. (2006) have highlighted how the offspring of parents with bipolar disorder used fewer task-oriented and stronger ruminative coping strategies than controls. Moreover, symptomatic children of parents with BD have also a stranger ruminative style in comparison to children of parents with BD with no symptoms (Jones et al, 2006). Furthermore, female participants were more likely to endorse emotion-focused and avoidant responses to stress than male participants.

Sullivan et al evaluated the relationship between changes in family functioning and in patients' mood symptoms in adolescent with BD, who participated in a 2 years RCT of family-focused treatment for adolescents (FFT-A). The extent of familiar conflict has been linked to the severity of adolescents' manic symptoms overtime.

# Efficacy of psychosocial intervention in improving relatives coping strategies

This category includes 6 studies (Table 3). 1 of them was a randomized controlled trial, 5 of them were cohort studies.

Bernhard et al. (2005) have assessed the effectiveness of a psychoeducational group intervention for patients with bipolar disorder and of two psycho-educational workshops for their relatives on several clinical and psychosocial outcomes. Among others, relatives reported an improvement in the knowledge about possible coping strategies to be used, with a reduction of caregivers' burden and reduced levels of expressed emotions at one-year followup.

Knutsson et al. (2017) presented a case series in which they assessed the efficacy of a child and family-focused cognitive behavioral therapy (CFF-CBT) for children with pediatric bipolar disorder and their family. It emerged that treated relatives reported an improvement in their knowledge of the disorders of their ill relative and that the intervention improved their skills to cope with the disorder. Similar results have been reported by Sampogna et al. (2018), who highlighted that the provision of a psycho-educational family intervention is associated to an improvement of adaptive coping strategies (i.e., reduction in the use of emotion-focused strategies and an improvement in problem-oriented ones). Similar results have been reported by Pavuluri Mani et al. (2004) who reported that the provision of an adjunctive Child and Family-Focused Cognitive Behavioural Therapy (CFF-CBT) was associated to a reduction in worries, activity restrictions and isolation in relatives of patients with paediatric BD. These results have been confirmed by West et al (2014), who carried out a randomized controlled trial providing the CFF-CBT in a wider sample.

Perlick et al have compared, in a randomized controlled trial, the efficacy of 12–15-sessions of family-focused treatment with a 8-12sessions of health education (HE) intervention delivered via videotapes. FFT-HPI was associated with

significant decreases in caregiver depressive symptoms and health risk behaviours. Decreases in caregiver's depression were partially mediated by reductions in caregivers' levels of avoidance coping. They reported that families coping with bipolar disorder might benefit from family interventions because of changes in the caregivers coping and regulate their moods, even when the patient is not available for treatment.

### DISCUSSION

Most of the relevant research on caregivers' coping strategies involves patients with schizophrenia, and only negligible differences in caregiver burden, coping mechanisms and need for support are detected when the caregivers for patients with a bipolar disorder were considered (Chakrabarti et al.1995, Mueser et al. 1996, Perlick et al.1999, Nehra et al. 2005, Ogilvie et al. 2005). This review provides more knowledge on coping and needs for support of caregivers of patients with a bipolar disorder.

Assessed papers report heterogeneous results regarding the adoption of caregivers' coping strategies. In fact, while some authors (Pavlickova et al, 2014; Bridi et al., 2018; Goossens et al, 2008) reported that maladaptive coping strategies are most frequent in caregivers of patients with BD, others (Grover et al, 2017; Chakrabarti et al, 2002; Nehra et al, 2005) reported a slightly higher tendency of relatives to adopt problem-oriented coping strategies.

These contrasting results can be explained by the fact that in several papers only patients in a stable phase of their disorder were recruited. Such methodological choice may have impacted on the coping strategies adopted, since family members may have already developed some resiliency factors (such as adaptive coping strategies). In fact, as van der Voort et al (2010) observed, caregivers' difficulties coping with patients' behaviours are associated with a high number of relapses and hospitalizations, and with symptoms' severity and therefore are strongly correlated with the severity of symptomatology. Also Chakrabarti et al (2002) and Nehra et al (2005) reported that relatives adopted more frequently problem-oriented coping strategies. However, these two studies were conducted in India, which somewhat limits the generalizability of the findings.

Another important focus of our review is the inclusion of papers assessing coping strategies of offspring of patients with BD. Despite the relevance of this issue, only three papers have been detected, whose primary aim was not the assessment of coping strategies. In these studies, coping strategies have been assessed as possible predictors of the onset of a BD in high-risk populations. According to these studies maladaptive coping strategies, and especially emotionfocused coping strategies (i.e., avoidance and social isolation) have been identified as possible markers of bipolar illness (Jones et al, 2006). Nijjar et al (2014) reported that offspring of parents with bipolar disorder reported less task-focused

coping and more distraction-focused coping than controls. Moreover, female offspring of parents with bipolar disorders were more likely to endorse the use of emotion-focused coping than high-risk males and controls. These results, however, must be cautiously interpreted, since no other evidences are available.

Another important result of this review is that almost all studies assessing the efficacy of psychosocial intervention in improving relatives' coping strategies, reported positive results, independently from the adopted approach. Included adopted mainly psycho-educational interventions, family focused papers treatment and family cognitive behavioural therapy. Perlicket al. (2010) reported that patients and relatives reported positive changes in the caregivers coping (i.e., a reduction in avoidance coping) and that this improvement is strongly correlated with an improvement of mood, mediated even when the patient is not available for treatment. Sampogna et al. (2018) shows that psycho-educational family intervention is effective in improving the adaptive coping strategies of relatives of BD-I patients, (reduction in the use of emotion - focused strategies and an increase in problem-oriented ones). Regarding the setting, there is no unanimity of consensus to set up mixed groups (patients and family members together) or to carry out separate interventions. From the experience of Bernhard et al, it seems that conducting interventions in separate groups gives family members the opportunity to feel more at ease, allowing them to exchange experiences to a greater extent than would be possible in a mixed group, but no consensus has been reached among the most appropriate setting to adopt in order to improve relatives' coping strategies.

Despite this, it has to be said that studies assessing the efficacy of psychosocial interventions to improve caregivers' coping strategies present several limitations. The first is that only two RCTs has been found and that available RCTs have very small sample size. Other studies are observational in nature and carried out in "real world" settings and with a limited sample size. Moreover, in the majority of studies relatives' coping strategies have been evaluated through self-reported questionnaire, which provided limited evidence compared to clinician reported assessment instruments. Other limitations of these studies are the fact that higher drop-out rates have been reported.

However, taken together, studies assessing the efficacy of psychosocial interventions reported a general improvement of caregivers' coping strategies. This is a very relevant issue since adaptive coping strategies are essential for improving the level of family functioning and, consequently, to improve the longterm course of patients with BD. These findings further support the importance to routinely provide PFI to patients and family members. Further steps should be focused on the assessment of the level of satisfaction of users and carers with these kinds of interventions, to assess their cost-effectiveness and to find strategies in order to improve retention rates of recruited caregivers. Moreover, longitudinal longer follows-ups should be carried out, in order to assess the maintenance of acquired skills over a longer period.

# REFERENCES

- Bernhard B., Schaub A., Kummler P., Dittmann S., Severus E., Seemuller F., Grunze H., (2005). Impact of cognitive-Psychoeducational interventions in bipolar patients and their relatives. European Psychiatry, Mar. 21(2), 81-86.
- [2] Bridi K.P.B., Loredo-Souza A.C.M., Fitjman A., Vasconcelos Moreno M., Kauer-Sant'Anna M., Cereser K.M., Kunz, M., (2018). Differences in coping strategies in adult patients with bipolar disorder and their first-degree relatives in comparison to healthy controls. Trends in Psychiatry and Psychotherapy, Oct.-Dec. 40(4), 318-325.
- [3] Chakrabarti S., Gill S., (2002). Coping and its correlates among caregivers of patients with bipolar disorder: a preliminary study. Bipolar disorder. Feb. 4(1), 50-60.
- [4] Chakrabarti S., Raj L., Kulhara P., Avasthi A., Verma SK, (1995), Comparison of the extent and pattern of family burden in affective disorders and schizophrenia. Indian Journal of Psychiatry, Jul. 37(3), 105-12.
- [5] Crump C., Sundquist K., Winkleby M.A., Sundquist J. (2013). Comorbidities and mortality in bipolar disorder: a Swedish national cohort Study. JAMA Psychiatry, Sep. 70(9), 931-939.
- [6] Fadden G., Bebbington P., Kuipers L., (1987). Caring and its burdens. A study of the spouses of depressed patients. British Journal of Psychiatry, Nov. 151, 660-7.
- [7] Rea M. M., Tompson M. C., Miklowitz D. J., Goldstein M. J., Hwang S., Mintz J., (2003). Family-focused treatment versus individual treatment for bipolar disorder: results of a randomized clinical trial. Journal of consulting and Clinical Psychology. Jun. 71(3), 482-92.
- [8] Fiorillo A., Del Vecchio V., Luciano M., Sampogna G., De Rosa C., Malangone C., Maj M., (2015). Efficacy of psychoeducational family intervention for bipolar I disorder: a controlled, multicentric, real-world study. Journal of affective disorder, Feb. 1, 172, 291-9.
- [9] Fiorillo A., Luciano M., Del Vecchio V., Sampogna G., Obradors-Tarragò C., Maj M.; ROAMER Consortium, (2013). *Priorities for mental*

health research in Europe: a survey among national stakeholders' associations within the ROAMER project. World Psychiatry, Jun. 12(2), 165-70.

- [10] Goossens P.J., Knoppert-Van Der Klein E. A., Van Achterberg
  T., (2008). Coping styles of outpatients with a bipolar disorder.
  Archives of psychiatric nursing, Oct. 22 (5), 245-253.
- [11] Goossens P. J., Van Wijngaarden B., Knoppert-van Der Klein E. A., Van Achterberg T., (2008). Family caregiving in bipolar disorder: caregiver consequences, caregiver coping styles, and caregiver distress. International Journal of Social Psychiatry, Jul. 54(4), 303-6.
- [12] Grover S., Kate N., Chakrabarti S., Avasthi A., (2017). Positive aspects of caregiving and its correlates among caregivers of bipolar affective disorder. East Asian Archives of Psychiatry, Dec. 27(4), 131-41.
- [13] Hayes J. F., Marston L., Walters K., Geddes J. R., King M., Osborn, D. P.. (2016). Lithium vs. valproate vs. olanzapine vs. quetiapine as maintenance monotherapy for bipolar disorder: a population-based UK cohort study using electronic health records. World Psychiatry, Feb. 15(1), 53–58.
- [14] Hoenig J., Hamilton M. W., (1966). New developments in the public health service for mental patients in Great Britain. Fortschritte der Neurologie, Psychiatrie und ihrerGrenzgebiete, Nov. 34(11), 612-23.
- [15] Jones S. H., Evershed K., Knowles R., Bentall R., (2006). Early detection of bipolar disorder: a pilot familial high-risk study of parents with bipolar disorder and their adolescent children. Bipolar disorder, Aug. 8(4), 362-72.
- [16] Jönsson P. D., Skärsäter I., Wijk H., Danielson E., (2011). Experience of living with a family member with bipolar disorder. International Journal mental Health Nursing, Feb. 20(1), 29-37.
- [17] Jönsson P. D., Wijk H., Danielson E., Skärsäter I., (2011). Outcomes of an educational intervention for the family of a person with bipolar disorder: a 2-year follow-up study. Journal Psychiatric Mental Health Nursing, May. 18(4), 333-41.

- [18] Knutsson J., Bäckström B., Daukantaité D., Lacerof F., (2016). Adolescent and family-focused cognitive-behavioural therapy for paediatric bipolar disorders: a case series. Clinical psychology and psychotherapy, May. 24(3),589-617.
- [19] Lazarus R. S., Folkman, S., (1984). *Stress, appraisal, and coping.* Springer publishing company.
- [20] Kleinman L., Lowin A., Flood E., Gandhi G., Edgell E., Revicki D., (2003). Costs of bipolar disorder. Pharmacoeconomics 21(9), 601-22.
- [21] Luciano M., Del Vecchio V., Sampogna G., De Rosa C., Fiorillo A., (2015). Including family members in psychoeducation for bipolar disorder: is it worth it?. Bipolar disorder, Jun. 17(4), 458-9.
- [22] Maurin J. T., Boyd C. B., (1990). Burden of mental illness on the family: a critical review. Archives of Psychiatric nursing, Apr. 4(2), 99-107.
- [23] McGirr A., Vöhringer P.A., Ghaemi S.N., Lam R.W., Yatham, L.N., (2016). Safety and efficacy of adjunctive second-generation antidepressant therapy with a mood stabilizer or an atypical antipsychotic in acute bipolar depression: a systematic review and meta-analysis of randomized placebo-controlled trials. Lancet psychiatry, Dec. 3(12), 1138-1146.
- [24] Mueser KT., Webb C., Pfeiffer M., Gladis M., Levinson DF., (1996). Family burden of schizophrenia and bipolar disorder: perceptions of relatives and professionals. Psychiatry Services, May. 47(5), 507-11.
- [25] Nehra R., Chakrabarti S., Kulhara P., Sharma R., (2005). Caregiver-coping in bipolar disorder and schizophrenia - a reexamination. Social Psychiatry and Psychiatic Epidemiology, Apr. 40(4), 329-36.
- [26] Nijar R., Ellenbogen M.A., Hodgins S., (2014). Personality, coping, risky behavior, and mental disorders in the offspring of parents with bipolar disorder: a comprehensive psychosocial assessment. Journal of affective disorders, Sep. 166:315-23.

- [27] Ogilvie AD., Morant N., Goodwin GM., (2005). The burden on informal caregivers of people with bipolar disorder. Bipolar Disorder, 7 suppl 1: 25-32.
- [28] Pavlickova H., Turnbull O., Bentall R.P., (2014). Cognitive vulnerability to bipolar disorder in offspring of parents with bipolar disorder. British Journal of Clinical Psychology, Nov; 53(4),386-401.
- [29] Pavuluri MN., Graczyk PA., Henry DB., Carbray JA., Heidenreich J., Miklowitz DJ., (2004). *Child - and family-focused cognitive-behavioral therapy for pediatric bipolar disorder: development and preliminary results*. Journal of the American Academy of Child and Adolescent Psychiatry's, May. 43(5), 528-37.
- [30] Perlick D., Clarkin JF., Sirey J., Raue P., Greenfield S., Struening E., Rosenheck R., (1999). Burden experienced by caregivers of persons with bipolar affective disorder. The British Journal of Psychiatry, Jul. 175:56-62.
- [31] Perlick D.A., Miklowitz D.J., Lopez N., Chou J., Kalvin C., Adzhiashvili V., Aronson A., (2010). Family-focused treatment for caregivers of patients with bipolar disorder. Bipolar disorders, Sep. 12(6), 627-637.
- [32] Rea MM., Tompson MC., Miklowitz DJ., Goldstein MJ., Hwang S., Mintz J., (2003). Family-focused treatment versus individual treatment for bipolar disorder: results of a randomized clinical trial. Journal of consulting and clinical psychology, Jun. 71(3), 482-92.
- [33] Reinares M., Colom F., Rosa A.R., Bonin C.M., Franco C., Solè
  B., Kapczinski F., Vieta E., (2010). The impact of staging bipolar disorder on treatment outcome of family psychoeducation. Journal of affective disorders, Jun. 123(1-3), 81-6.
- [34] Reinares M., Colom F., Sanchez-Moreno J., Torrent C., Martinez-Aran A., Comes M., Vieta E., (2008). Impact of caregiver group psychoeducation on the course and outcome of bipolar patients in remission: a randomized controlled trial. Bipolar Disorder, Jun. 10(4), 511-9.
- [35] Sampogna G., Luciano M., Del Vecchio V., Malangone C., De Rosa C., Giallonardo V., Fiorillo A., (2018). The effects of psychoeducational family intervention on coping strategies of relatives

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of patients with bipolar I disorder: results from a controlled, real-word, multicentric study. Neuropsychiatric disease and treatment, Apr. 11,14. 977-989.

- [36] Sin J., Gillard S., Spain D., Cornelius V., Chen T., Henderson C., (2017). *Effectiveness of psychoeducational interventions for family carers of people with psychosis: a systematic review and meta-analysis.* Clinical Psychology review, Aug. 56, 13-24.
- [37] van Der Voort T.Y., Goossens P.J., van der Bijl J.J., (2007). Burden, coping and needs for support of caregivers for patients with a bipolar disorder: a systematic review. Journal Psychiatric Mental Health Nursing, Oct. 14(7), 679-87.
- [38] West AE., Weinstein SM., Peters AT., Katz AC., Henry DB., Cruz RA., Pavuluri MN., (2014). Child and family-focused cognitivebehavioral therapy for pediatric bipolar disorder: a randomized clinical trial. Journal of the American Academy of Child & Adolescent Psychiatry, Nov. 53(11), 1168-78.
- [39] Zaretsky A.E., Rizvi S., Parick S.V., (2007). *How well do psychosocial interventions work in bipolar disorder?* The Canadian journal of psychiatry, Jan. 52(1),14-21.