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Expressed Emotion and Sensitivity to Criticism in Schizophrenic and Mood Disorder Patients

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Abstract:

Expressed emotion (EE) refers to the quality of the emotional climate between a relative and a family member with a serious psychiatric disorder. Present study was aimed at studying expressed emotion and sensitivity to criticism in schizophrenic and mood disorder patients. Total sample of the present study comprised 75 subjects, 25 each, in three categories, i.e., schizophrenic patients, mood disorder patients and the control group. Data was collected by administering expressed emotion (LEE) scale and sensitivity to criticism (STC) scale. Obtained data were analyzed with the help of one way ANOVA and post-hoc (Scheffe) test. Results showed that on all the four dimensions of expressed emotion schizophrenic patients differed significantly from mood disorder patients and the control group. Mood disorder patients also differed significantly from the control group on all the dimensions of expressed emotion. On sensitivity to criticism, schizophrenic patients and mood disorder patients differed significantly from the control group. However, a significant difference was not found between schizophrenic and mood disorder patients on this dimension.

Keywords: Expressed emotions, sensitivity to criticism, schizophrenic and mood disorder

1. Introduction

1.1. Expressed Emotion (EE)

Expressed emotion has been used as a construct in understanding the interaction between patients and their carers and families. There are five components of EE: emotional over-involvement (exaggerated emotional response, excessive self sacrifice or devoted behavior and marked-over-protectiveness), critical comments, hostility, positive remarks and warmth (Bhurga & McKenzie, 2003). Higher subjective levels of burden and personal stress have been reported by high EE relatives compared with low EE relatives (Smith, Birchwood, Cochrane, et al, 1993). Expressed emotion is construed as reflecting disturbances in the organization, emotional climate, and transactional patterns of the entire family system (Hooley, 2007). Theoretically, a high level of EE in the home can worsen the prognosis in patients with mental illness, such as schizophrenia and social anxiety disorder Brown, Birley, & Wing, 1972; Garcia-Lopez, Muela, Espinosa-Fernández, & Diaz-Castela, 2009), or act as a potential risk factor for the development of psychiatric disease (Asarnow, Tompson, Woo, Cantwell, 2001).

1.2. Expressed Emotion and Schizophrenia

Two studies in Britain (Brown, Birley, and Wing, 1972; Vaughn and Leff 1976a) found that schizophrenia patients who left the hospital to live with one or more relatives who made many critical comments about the patient during a private interview or who displayed a marked degree of emotional over involvement in the patient's life had a significantly greater risk of relapse within 9 months of hospital discharge (51 % relapse rate) than did patients living with relatives who were less critical and less emotionally over involved (13%) (Hooley 1986). The results of studies conducted by Goldstein, Rosenfarb, Woo, and Nuechterlein (1994) suggest that persons with schizophrenia in high expressed emotion families show both more verbal (e.g., delusions, suspiciousness, socially inappropriate behavior) and nonverbal (e.g., hostility) subclinical symptoms of psychopathology during interactions with family members than do individuals with schizophrenia in low expressed emotion families (Goldstein et al., 1994; Rosenfarb, Goldstein, Mintz, & Nuechterlein, 1995; Woo, Goldstein, & Nuechterlein, 2004). Furthermore, when persons with schizophrenia behave in odd or unusual ways, family members of high expressed emotion households tend to be more likely to respond to the behavior with

criticism than in low expressed emotion households. In turn, individuals with schizophrenia become more symptomatic in response to these critical comments (Woo et al., 2004). Indeed, there is a growing body of evidence to support that family members' beliefs about schizophrenia, their appraisals of the stress in care-giving and the patient's level of control over their own symptoms are associated with the level of EE (Raune, Kuipers, Bebbington, 2004). Cutting, Aakre, & Docherty, (2006) in their study found that the association between high EE influential others and patient relapse was because patients experienced high EE as stressful. It is now very clear that high family level of EE are reliably associated with higher rates of relapse in the patients with schizophrenia. In a meta analysis of 26 studies Butzlaff and Hooley (1998) demonstrated that living in high EE home environment more than doubled the baseline relapse rate for schizophrenic patients 9 to 12 months after hospitalization. Criticism directed by caregivers towards a family member with schizophrenia, both from the perspective of the patient and of the caregiver, predicts relapse (Medina-Pradas, Navarro, Pousa, Montero and Obiols, 2013).

1.3. Expressed Emotion and Mood Disorders

According to World Health Organization (WHO), mood disorders are one of the most important worldwide health issues of the 21st century (Boyd, 2007). Expressed emotion was initially developed and validated as a predictor of relapse in patients with schizophrenia (Brown, Birley, & Wing, 1972). A recent meta-analysis demonstrated that expressed emotion is an even stronger predictor of poor outcome for patients with mood disorders and eating disorders than it is for patients with schizophrenia (Butzlaff, Hooley, 1998). The prospective study of Mino, Shimodera, Inoue, Fujita, Tanaka and Kanazawa (2001) suggested that the association of EE with relapse might be even stronger in depression than in schizophrenia. Those living with a critical spouse tend to have higher rates of relapse and more chronic conditions compared to depressed people with a less critical and more supportive spouse (Belsher & Costello, 1988; Hooley & Teasdale, 1989). A critical spouse is associated with more maladaptive coping and negative self-evaluations, indicating that depressed people may blame themselves for the criticism or rejection (Beach, Sandeen & O'Leary, 1990).

Patients with schizophrenia, bipolar disorder, or recurrent major depressive disorder who return home to high-EE families following an acute episode are two to three times more likely to relapse in the subsequent 9 months than are patients who return to low-EE families (Barrowclough & Hooley, 2003; Miklowitz, 2004). In a trial in 2010 it was observed that family's levels of conflict in bipolar patients was higher than families of normal people and also impairment in cohesion and adaptability was higher in such families and things with families with high EE is even worse (Sullivan & Miklowitz, 2010).

1.4. Sensitivity to Criticism

Numerous studies have been carried out to examine the relationship between patients' sensitivity to criticism and their course of illness. For example, Scott et al., (1997) found that the best predictor of relapse was patients' expectations' about how their parents would see them. Barve & King (1997) found that the most important variable affecting outcome may not be the level of criticism or over involvement per se, but rather how much is "getting through to the patients." Scazufca, Kuipers, Menezes (2001) found a significant association between patients' perceptions of criticism from close relatives and the number of CCs made by the relatives. Patients' perceptions are likely to be influenced by EE attitudes of those close to them and also by their own characteristics, such as their sensitivity to criticism (STC). Persistent effects have been observed even after self-reported childhood emotional maltreatment, in the absence of physical or sexual abuse, (van Harmelen, van Tol, van der Wee, et al. (2010) showing that the human brain is exceptionally sensitive to interpersonal distress.

Conclusively, we can say that a patient's level of sensitivity to criticism plays an important role the perception of the relatives' attitudes towards him or her.

1.5. Sensitivity to Criticism and Schizophrenia

Patients with schizophrenia appear to be accurate perceivers of others' emotional attitudes (Tompson et al. 1995; Scazufca et al. 2001), and hardly tolerate highly expressed emotions and criticism from those closest to them and most influential in their life (influential others) (Barrelet, Ferrero, Szigethy, Giddey, Pellizzer, 1990; Cutting, Aakre, & Docherty, 2006). It has long been known that people who have schizophrenia are more likely to relapse if they come from families where they experience high levels of criticism, hostility and over involvement. New psychosocial interventions that aim to reduce levels of these potentially negative emotions are now widely used, although their effectiveness has not been proved. The most important sources of stress for psychiatric patients come from the strain and tension within the family (Wiley-Blackwell, 2010, Walz, leucht, et al; 2004; Munro, Osborne, Pearden and Pascore, 2011).

1.6. Sensitivity to Criticism and Mood Disorders

Sensitive persons can certainly have mood disorders, but should not be mistaken for being chronically depressed only because of a pessimistic view of the future of the world or of their own abilities (a pessimism which may well be accurate, as in the case of depressive realism, Taylor & Brown, 1988). There is also evidence that people prone to depression make internal, stable attributions (self-blame) for personal failure and criticism by others (Bowlby, 1980; Driscoll, 1988; Miller & Moretti 1988; Peterson, Maier & Seligman, 1993). In one of the few studies that examined the role of upset in predicting outcome, Miklowitz, Wisniewski, Miyahara, Otto, and Sachs (2005) found that how upset patients with bipolar disorder felt in response to criticisms from key relatives predicted treatment outcome (depressive and manic symptoms), although PC did not. They suggested that heightened sensitivity to criticism, rather than perception of criticism per se, merited further study. Thus, the extant literature is mixed as to which variable is more important, PC or sensitivity to that criticism. As individuals with bipolar disorder have a heightened sensitivity to conflict (Miklowitz

and Goldstein 1997, p. 42), one might speculate that parental tension caused by disagreements over the most appropriate treatment and methods to manage symptoms of bipolar disorder, a condition that is very trying for families (Hellander et al 2003), would have a deleterious impact on a child's recovery from a manic or depressive episode.

1.7. Rationale

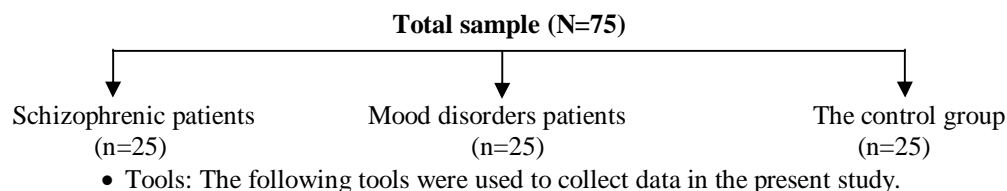
A number of studies have been conducted on the significance of the expressed emotion on the course of various mental illnesses. The findings of these studies have shown the presence of expressed emotions in the families and relatives of patients suffering from a mental illness such as schizophrenia and mood disorder. However, literature on the comparative role of the expressed emotion (EE) in various disorders is scarce. Similarly, no comparative study on the level of sensitivity to criticism between patients of schizophrenia and mood disorders has been reported. In view of increasing incidence of schizophrenia and mood disorders in India, this study was planned to assess the role of the expressed emotion and sensitivity to criticism in schizophrenia and mood disorders patients.

2. Methods

2.1. Participants

The total sample was 75 subjects. Out of which 25 were patients of schizophrenia, 25 were mood disorder (both unipolar and bipolar) patients, and 25 were the control group. The patients groups were taken from Ram Manohar Lohia Hospital (RML), and Sanjivini a non-government organization (NGO), New Delhi. The control group was taken from various localities of south Delhi. This group was matched with patients groups in terms of important characteristics such as gender, age, education, socioeconomic status. Those who had psychological and major physical problems were excluded from the control group.

Diagrammatical presentation of the sample is as follows:



2.2. The Level of Expressed Emotion Scale

Developed by Cole and Kazarian (1988) was used to measure the level of expressed emotion. This scale was developed to provide an index of the perceived emotional climate in a person's influential relationships. The scale has been constructed on the basis of a conceptual framework described by expressed emotion theorists. In addition to providing an overall score, the 38 item scale has four dimensions –lack of emotional support (LES), intrusiveness (INTR), irritability (IRRI), and criticism (C). The distribution of the items is as follows:

LES dimension includes items 1,2,3,4,7,8,9,10,13,15,17,18,19,21,24,25,28,32, and 33.

INTR dimension includes items 5, 11, 14, 16,20,22,26, and 30.

IRRI dimension includes items 6, 12,23,27,29, and 31.

C dimension includes items 34,35,36,37, and 38.

Reliability and validity coefficients of the scale are .95 and .86 respectively.

2.3. The sensitivity to criticism (STC) scale

Developed by Atlas (1994) was used to measure participants' sensitivity to criticism. This scale consists of 30 items. This scale has a reliability estimate of 0.91 in several studies (Atlas, 1994). High scores on the sensitivity to criticism scale were found to be related to high levels of neuroticism, depression, fear of negative evaluation, pessimistic explanatory style, and low scores on self-esteem and repression.

2.4. Procedure

In order to collect the data, the scales of level of expressed emotion and sensitivity to criticism were administered to the subjects individually after rapport formation. Then the data were analyzed with the help of One-Way ANOVA and multiple comparisons of means.

3. Results

The obtained results are being presented in the following tables

	Between Groups	Sum of Squares	Df	Mean Square	F	Sig
LES		596.19	2	298.09	13.77	.01
	Within Groups	1557.79	72	21.64		
	Total	2153.98	74			

Table 1: Summary of One way ANOVA for Lack of emotional support (LES)

It can be seen from table 1 that there was significant F- ratio at .01 levels. It means that there was significant difference among the three groups- schizophrenic patients (group 1), mood disorders patients (group 2), and the the control group (group 3).

Dependent variable	(I) GRP	J (GRP)	Mean Difference (I-J)	Sig.
LES	1.00	2.00	11.88	.01
		3.00	28.96	.01
	2.00	3.00	17.08	.01

Table 2: Post-hoc analysis (Scheffe test) for LES

Table-2 revealed that schizophrenic patients differed significantly from mood disorder patients and the control group at .01 levels. Mood disorders patients also differed significantly at .01 levels on lack of emotional support.

Between Groups	Sum of Squares	df	Mean Square	F	Sig.
	105.52	2	82.76	13.67	.01
Within Groups	437.98	72	6.08		
Total	543.50	74			

Table 3: One way ANOVA summary for Intrusiveness (INTR) dimension of expressed emotion

Table- 3 showed that there was significant F-ratio at 0.01 levels for intrusiveness dimension of expressed emotion.

(I) GRP	(J) GRP	Mean Difference (I-J)	Sig.
1.00	2.00	5.72	.01
	3.00	11.68	.01
2.00	3.00	5.96	.01

Table 4: Post-hoc (Scheffe) test for Intrusiveness (INTR)

Table-4 scheffe test showed significant differences between schizophrenic patients and mood disorders patients and between schizophrenic patients and the control group at 0.01 levels. Significant difference at 0.01 levels was also found between mood disorders patients and the control group on intrusiveness dimension of expressed emotion.

Between Groups	Sum of Squares	Df	Mean Square	F	Sig.
	178.96	2	89.48	14.01	.01
Within Groups	459.76	72	6.39		
Total	638.72	74			

Table 5: One-way summary for irritability (IRRI) dimension of expressed emotion

Table-5 revealed significant F- ratio at 0.01 levels for irritability.

(I) GRP	(J) GRP	Mean Difference (I-J)	Sig.
1.00	2.00	3.80	.01
	3.00	9.64	.01
2.00	3.00	5.84	.01

Table 6: Post-hoc (Scheffe) test for irritability (IRRI)

It can be seen from table-6 that schizophrenic patients differed significantly from mood disorders and the control group at 0.01 levels. Moreover, significant difference was also found between mood disorders patients and the control group.

Between Groups	Sum of Squares	Df	Mean Square	F	Sig.
	1093.68	2	426.84	145.27	.01
Within Groups	262.00	72	3.64		
Total	1355.68	74			

Table 7: One-way ANOVA summary for criticism (C) dimension of expressed emotion

Table-7 showed significant F-ratio for criticism dimension of expressed emotion.

(I) GRP	(J) GRP	Mean Difference (I-J)	Sig.
1.00	2.00	5.88	.01
	3.00	9.24	.01
2.00	3.00	3.36	.01

Table 8: Post-hoc (Scheffe) test for Criticism

Post-hoc test (table-8) revealed significant differences between schizophrenic patients and mood disorders patients, and between schizophrenic patients and the control group at 0.01 levels. Moreover, significant difference was also found between mood disorder patients and the control group at 0.01 levels.

Between Groups	Sum of Squares	df	Mean Square	F	Sig.
	9115.28	2	4557.64	79.91	.01
Within Groups	4165.42	72	57.85		
Total	5080.70	74			

Table 9: One-way ANOVA summary for Sensitivity to Criticism (STC)

Significant F-ratio was obtained at 0.01 levels for sensitivity to criticism (table-9).

(I) GRP	(J) GRP	Mean difference (I-J)	Sig.
1.00	2.00	2.76	Non-significant
	3.00	91.32	.01
2.00	3.00	88.56	.01

Table 10: Post-hoc (Scheffe) test for sensitivity to criticism

Post-hoc (Scheffe) test (table-10) revealed there were significant differences between schizophrenic patients and the control group and between mood disorders patients and the control group at 0.01 levels. However, no significant difference was found at 0.05 levels between schizophrenic patients and mood disorder patients.

4. Discussion

The purpose of this investigation was to study and compare the level of expressed emotion in schizophrenic patients, mood disorder patients and the control group. The total sample of the study was 75 subjects. Out of which 25 were schizophrenic patients, 25 were mood disorders patients and 25 the control group. The participants included both males and females and the age range taken was from 20 to 50 years. Two scales were used to collect data; the expressed emotion was measured by the Level of Expressed Emotion Scale (LEE) and sensitivity to criticism was measured by the Sensitivity to Criticism (STC) Scale. The LEE scale has four dimensions – lack of emotional support (LES), intrusiveness (INTR), irritability (IRRI), and criticism (C).

The data collected from Delhi was analyzed with the help of One-way ANOVA followed by a post-hoc (Scheffe) test. Results showed that the schizophrenic scored highest on all the dimensions of expressed emotion. The the control group scored lowest on these dimensions. The expressed emotion score of mood disorder patients falls between the means of schizophrenics and the control group. Thus, the three groups differed significantly from one another on all the dimensions of expressed emotion. Schizophrenic patients and mood disorder patients also differed significantly from the control group on sensitivity to criticism. However, significant difference was not found between schizophrenic and mood disorder patients on sensitivity to criticism.

It was found in the present investigation (table-2) that schizophrenic patients differed significantly at 0.01 levels from both mood disorders patients and the control group on lack of emotional support dimension of expressed emotion. Expressed emotion is an important prognostic factor during the recovery process of those diagnosed with psychological illnesses. It is defined as the measure of how well relatives of a psychological patient express their attitude towards him or her. It is a dichotomous measure with a relative classified as either high on EE or low on EE, depending on the ratings of the subject on the four dimensions, i.e., lack of emotional support, intrusiveness, irritability, and criticism. Lack of emotional support means the family members' absence; both physically and psychologically can be stressful for the patients. It may lead to feelings of loneliness and low self-esteem. Thus, in the present investigation schizophrenic patients experienced these feelings more than mood disorder patients and the control group.

Mood disorder patients also differed significantly from the control group at 0.01 levels on lack of emotional support (table-2). Thus, mood disorder patients experienced more feelings of loneliness and low self-esteem than the control group.

Schizophrenic patients differed significantly at 0.01 levels from mood disorder patients and the control group on intrusiveness dimension of expressed emotion (table-4). Intrusiveness means the "significant others" may tend to intrude into the private affairs of the patient as they consider him/her unable to deal with them. This, in turn, may prove stressful for the patient. Such type of stress was experienced more by schizophrenic patients than mood disorder patients and the control group. Table-4 also revealed a significant difference at 0.01 levels between mood disorder patients and the control group on intrusiveness. This means that mood disorder patients experienced more intrusiveness in their private affairs by significant others than the control group.

Table-6 showed that schizophrenic patients differed significantly at 0.01 levels from mood disorder patients and the control group on irritability dimension of expressed emotion. Irritability refers to the attitude and behavior of the family members may be such that the patient gets irritated. It includes such behavior as constant nagging which is stressful for the patient. Thus, such type of stress was experienced more by schizophrenic patients than both mood disorder patients and the control group. Mood disorder patients also differed significantly from the control group at 0.01 levels on irritability. Thus, such type of stress was experienced more by mood disorder patients than the control group.

Table-8 revealed that schizophrenic patients differed significantly at 0.01 levels from mood disorder patients and the control group on criticism dimension of expressed emotion. Criticism refers to critical expressed emotion from siblings and parents that are the cause of future and increasing problems for the patients. Mood disorder patients differed significantly from the control group at 0.01 levels on

criticism (table-8). Thus, mood disorder patients received more critical expressed emotion from their siblings and parents than the control group.

Results showed that on all the dimensions of expressed emotion schizophrenic patients scored highest followed by mood disorder patients and the control group. The obtained results seem to be logical because schizophrenia, being a severe psychological disorder, brings enormous difficulties to the family members, particularly to parents. They often feel difficulty and sometimes face stigma attached to psychological patients. As a result they become irritated and engage in self-blaming, thus engaging in expressed emotion. Schizophrenia and mood disorders have different degrees of psychosocial and occupational implication. In addition, the family deals with the secondary consequences of the patients' illness such as financial burden, mental fatigue, and the patients' inability to cope with day to day life. Generally, these factors are stronger in patients suffering from schizophrenia than in mood disorder patients. Mood disorder patients are generally able to manage their day to day life as compared to the schizophrenic patients who need incessant supervision. In addition, the patients with mood disorders have an insight into their illness whereas schizophrenic patients generally lack such an insight. Consequently, the families of schizophrenic patients frequently engage in expressed emotion as compared to the families of mood disorders.

These results are in agreement with the findings of other studies such as (Kavanagh, 1992; Cutting & Docherty, 2000) have examined relatives' influence on relapse rates through psychosocial stress mechanisms in the home environment of patients. Two studies in Britain (Brown et al. 1972; Vaughn and Leff 1976a) found that schizophrenia patients who experienced critical comments and emotional over involvement had a significantly greater risk of relapse than did patients living with relatives who were less critical and less emotionally over involved (13%) (Hooley 1986). Similarly, Goldstein, Rosenfarb, Woo, and Nuechterlein (1994) suggest that persons with schizophrenia in high expressed emotion families show both more verbal and nonverbal subclinical symptoms of psychopathology. Furthermore, when persons with schizophrenia behave in odd or unusual ways, critical comments of family members may increase the symptomatic in response to these (Woo et al., 2004). The patient's appraisals of the stress in care-giving and the patient's level of control over their own symptoms are associated with the level of EE (Raune, Kuipers, Bebbington, 2004). Cutting, Aakre, & Docherty, (2006) in their study found that the association between high EE influential others and patient relapse was because patients experienced high EE as stressful. In a meta analysis of 26 studies Butzlaff and Hooley (1998) demonstrated that living in high EE home environment more than doubled the baseline relapse rate for schizophrenic patients. Criticism directed by caregivers towards a family member with schizophrenia predicts relapse (Medina-Pradas, Navarro, Pousa, Montero and Obiols, 2013). The study of Mino, Shimodera, Inoue, Fujita, Tanaka and Kanazawa (2001) suggested that the association of EE with relapse might be even stronger in depression than in schizophrenia. A critical spouse is associated with more maladaptive coping and negative self-evaluations, indicating that depressed people may blame themselves for the criticism or rejection (Beach, Sandeen & O'Leary, 1990). Patients with schizophrenia, bipolar disorder, or recurrent major depressive disorder who undergone high-EE are two to three times more likely to relapse (Barrowclough & Hooley, 2003; Miklowitz, 2004). In another study family's levels of conflict in bipolar patients was higher than families of normal people and also impairment in cohesion and adaptability was higher in such families and things with families with high EE is even worse (Sullivan & Miklowitz, 2010).

It was found from table-10 that schizophrenic patients and mood disorder patients differed significantly at 0.01 levels from the control group on sensitivity to criticism. However, significant difference was not found at 0.05 levels between schizophrenic patients and mood disorder patients on this dimension. The sensitivity to criticism has been found to be an important influential factor in the patients' perception of their relatives' attitudes. For example, patients who perceive their parents to be low in care (i.e., indifferent, or rejecting) or high in protection (i.e., controlling, intrusive, and infantilizing) had a more severe course of illness compared with patients who rated their parents as high in care and low in protection.

While some sensitivity to criticism can be normal, patients of psychological illnesses often have low self-esteem and self worth. It makes them more sensitive to rejection and failure. Thus, it can be said that because of the low self-esteem and self-worth, the schizophrenic and mood disorder patients differed significantly from the control group on the level of sensitivity to criticism. Generally, the patients in both the groups have low self-esteem and feelings of worthlessness. Consequently, they become more sensitive toward the behaviors of their families and relatives as compared to the the control group. The schizophrenic and mood disorder patients struggle with more or less similar consequences of these disorders, for example, hopelessness, low self-esteem, and worthlessness. Hence, both these groups tend to be more sensitive to criticism than the the control group. Scott et al., (1997) found that the best predictor of relapse was patients' expectations' about how their parents would see them.

Patients with schizophrenia appear to be accurate perceivers of others' emotional attitudes (Tompson et al. 1995; Sczufca et al. 2001), and hardly tolerate highly expressed emotions and criticism from those closest to them and most influential in their life (influential others) (Barrelet, Ferrero, Szigethy, Giddey, Pellizzer, 1990; Cutting, Aakre, & Docherty, 2006). The most important sources of stress for psychiatric patients come from the strain and tension within the family (Wiley-Blackwell, 2010, Walz, leucht, et al; 2004; Munro, Osborne, Pearden and Pascore, 2011). Similarly, Miklowitz, Wisniewski, Miyahara, Otto, and Sachs (2005) found that how upset patients with bipolar disorder felt in response to criticisms from key relatives predicted treatment outcome (depressive and manic symptoms), although PC did not. They suggested that heightened sensitivity to criticism, rather than perception of criticism per se, merited further study. As individuals with bipolar disorder have a heightened sensitivity to conflict (Miklowitz and Goldstein 1997, p. 42), one might speculate that parental tension caused by disagreements over the most appropriate treatment and methods to manage symptoms of bipolar disorder, a condition that is very trying for families (Hellander et al 2003), would have a deleterious impact on a child's recovery from a manic or depressive episode.

5. Conclusion

In sum, schizophrenic and mood disorder patients are common mental illnesses which are also influenced by psychosocial factors i.e. expressed emotion and sensitivity to criticism. High level of expressed emotions and sensitivity to criticism increases the chances of relapse of schizophrenic and mood disorder whereas low level of both the dimensions minimizes the probability of relapse.

6. References

- i. Asarnow, J. R, Tompson, M., Woo, S., Cantwell, D. P. (2001). "Is expressed emotion a specific risk factor for depression or a nonspecific correlate of psychopathology?". *J Abnorm Child Psychol* 29 (6): 573–83.
- ii. Atlas, G. D. (1994). Sensitivity to Criticism: A new measure of responses to everyday criticisms. *Journal of Psychoeducational Assessment*, 12, 241-253.
- iii. Barrelet, L., Ferrero, F., Szigethy, L., Giddey, C., Pellizzer, G. (1990). Expressed emotion and first- admission schizophrenia. Nine-month follow-up in a French cultural environment. *British Journal of Psychiatry* 156, 357–362.
- iv. Barrowclough, C., Hooley J.M. (2003). Attributions and expressed emotion: A review. *Clinical Psychology Review*. 2003;23:849–880. [PubMed]
- v. Barve, C., & King, S. (1997). Individual factors as buffers against parental criticisms. Poster session presented at Annual Meeting of the Society for Research in Psychopathology. Palm Springs: California, USA.
- vi. Beach, S. R. H., Sandeen, E. E., & O'Leary, K. D. (1990). *Depression in marriage*. New York: Guilford Press.
- vii. Belsher, G., & Costello, C. G. (1988). Relapse after recovery from unipolar depression: a critical review. *Psychological Bulletin*, 104, 84±86.
- viii. Bhurga., D., & McKenzie, K. (2003). Expressed emotion across cultures. *Advances in Psychiatric Treatment*, 9, 342-348.
- ix. Bowlby, J. (1980). *Loss: sadness and depression*. Attachment and loss, vol. 3. London: Hogarth Press.
- x. Boyd, M. A. (2007). *Psychiatric nursing: Contemporary practice*. (4th), Lippincott Williams & Wilkins, ISBN 0781791693, Philadelphia 10.1192/bjp.121.3.241.
- xi. Brown, G.W.; Birley, J. L.T.; and Wing, J. K. (1972). Influence of family life on the course of schizophrenic disorders: A replication. *British Journal of Psychiatry*, 121:241-258, 1972.
- xii. Butzlaff, R.L., Hooley, J.M. (1998). Expressed emotion and psychiatric relapse: A meta-analysis. *Archives of General Psychiatry* 1998;55:547-52.
- xiii. Cole, J. D., & Kazarian, S.S. (1988). The Level of Expressed Emotion Scale: A New Measure of Expressed Emotion. *Journal of Clinical Psychology*, 44, 392-397.
- xiv. Cutting, L. P., & Docherty, N.M. (2000). Schizophrenia Outpatients' Perceptions of their Parents: Is Expressed Emotion a Factor? *Journal of Abnormal Psychology*, 109, 266-272.
- xv. Cutting, L.P., Aakre, J.M., & Docherty, N.M. (2006). Schizophrenic patients' perceptions of stress, expressed emotion, and sensitivity to criticism. *Schizophrenia Bulletin*, 32(4), 743- 750.
- xvi. Driscoll, R. (1988). Self-condemnation: a conceptual framework for assessment and treatment. *Psychotherapy*, 26, 104±111.
- xvii. Garcia-Lopez, L.J., Muela, J.A. Espinosa-Fernández, L., & Diaz-Castela, M.M. (2009). Exploring the relevance of expressed emotion to treatment of social anxiety disorder in adolescence. *Journal of Adolescence*, 32, 1371-1376. doi: 10.1016/j.adolescence.
- xviii. Goldstein, M. J., Rosenfarb, I., Woo, S., & Nuechterlein, K. (1994). Intrafamilial relationships and the course of schizophrenia. *Acta Psychiatrica Scandinavica*, 90(Suppl.), 60–66.
- xix. Hellander, M., Sisson D. P., Fristad, M.A. (2003). Internet support for parents of children with early- onset bipolar disorder. In Geller B, Del Bello M, editors. *Bipolar Disorder in Childhood and Early Adolescence*. New York: Guilford Publications, Inc., pp 314–329.
- xx. Hooley, J.M. (2007). Expressed emotion and relapse of psychopathology. *Annu. Rev. Clin. Psychol.*, 3, 329–52.
- xxi. Hooley, J.M. (1986). An introduction to EE measurement and research. In: Goldstein, M.J.; Hand, I.; and Hahlweg, K., eds. *Treatment of Schizophrenia: Family Assessment and Intervention*. Berlin, Germany: Springer-Verlag, 1986. pp. 25-34.
- xxii. Hooley, J.M., and Teasdale, J. D.(1989). Predictors of relapse in unipolar depressives: expressed emotion, marital distress, and perceived criticism. *J Abnorm Psychol*. 1989; 98:229-35. Article | PubMed.
- xxiii. Kavanagh, D.J. (1992). Recent Developments in Expressed Emotion and Schizophrenia. *British Journal of Psychiatry*, 160, 601-620.
- xxiv. Leff, J., & Vaughn, C. (1985). *Expressed emotion in families*. London, New York: The Guildford Press.
- xxv. Medina-Pradas, C., Navarro, J.B., Pousa, E., Montero, M.I. and Obiols, J.E. (2013). Expressed and perceived criticism, family warmth, and symptoms in schizophrenia. *Span J Psychol*. 2013; 16:E45. | Article | PubMed.
- xxvi. Miller, D. T., & Moretti, M. M. (1988). The causal attributions of depressives: self-serving or self-disserving? In L. Alloy, *Cognitive processes in depression* (pp. 266±286). New York: Guilford Press.
- xxvii. Micklowitz, D.J. and Goldstein M.J. (1997) *Bipolar Disorder: A Family-Focused Treatment Approach*. New York, Guilford, 1997.
- xxviii. Miklowitz, D.J. (2004) The role of family systems in severe and recurrent psychiatric disorders: A developmental psychopathology view. *Development and Psychopathology*. 2004;16:667– 688. [PubMed].
- xxix. Miklowitz, D. J., Wisniewski, S. R., Miyahara, S., Otto, M. W., & Sachs, G. S. (2005). Perceived

- xxx. criticism from family members as a predictor of the 1-year course of bipolar disorder. *Psychiatry Research*, 136, 101–111.
- xxxi. Mino, Y., Shimodera, S., Inoue, S., Fujita, H., Tanaka, S. and Kanazawa S.(2001). Expressed emotion of families and the course of mood disorders: a cohort study in Japan. *J Affect Disord* 2001; 63: 43–9.
- xxxii. Munro, J., Osborne, S., Pearden, L., and Pascore, K. (2011). Hospital treatment and management in relapse of schizophrenia in the UK; associated costs; the psychiatrisit; 2011; 35, 95-100.
- xxxiii. Peterson, C., Maier, S. F., & Seligman, M. E. P. (1993). *Learned helplessness: a theory for the age of personal control*. New York: Oxford University Press.
- xxxiv. Raune, D., Kuipers, E., Bebbington, P. E. (2004). Expressed emotion at first-episode psychosis: investigating a carer appraisal model. *British Journal of Psychiatry* 184, 321-326.
- xxxv. Rosenfarb, I. S., Goldstein, M. J., Mintz, J., & Nuechterlien, K. H. (1995). Expressed emotion and subclinical psychopathology observable within the transaction between schizophrenic patients and their family members. *Journal of Abnormal Psychology*, 104, 259–267.
- xxxvi. Scazufca, M., Kuipers, E., Menezes, P.R. (2001). Perception of negative emotions in close relatives by patients with schizophrenia. *Br J Clin Psychol*. 2001;40:167–175.
- xxxvii. Scott, R.D., Fagin, L., & Winter, D. (1997). The importance of the role of the patient in the outcome of schizophrenia. *British Journal of Psychiatry*, 163, 62-68.
- xxxviii. Smith, J., Birchwood, M., Cochrane R, et al. (1993). The needs of high and low expressed emotion families: A normative approach. *Soc Psychiatry Psychiatr Epidemiol* 1993;28:11- 16.
- xxxix. Sullivan, A. E. & Miklowitz, D. J. (Feb 2010). Family functioning among adolescents with bipolar disorder. *Journal of Family Psychology*, Vol. 24, No. 1, pp. 60-7, ISSN 08933200.
- xl. Taylor, S. E., & Brown, J. D. (1988). Illusion and well being: A psychosocial perspective on mental health. *Psychological Bulletin*, 103, 193-210.
- xli. Tompson, M. C., Goldstein, M. J., Lebell, M. B., Mintz, L. I., Marder, S.R., Mintz, J. (1995). Schizophrenic patients' perceptions of their relatives' attitudes. *Psychiatry Research* 57, 155– 167.
- xlii. Van Harmelen, A. L., van Tol, M. J., van der Wee, N.J., et al.(2010). Reduced medial prefrontal cortex volume in adults reporting childhood emotional maltreatment. *Biol Psychiatry*. 2010;68:832–838.
- xliii. Vaughn, C., and Leff, J. (1976a) The measurement of expressed emotion in the families of psychiatric patients. *British Journal of Social and Clinical Psychology*, 15:157-165.
- xliv. Walz, G. P., leucht, S., et al, (2004). The effect of family interventions on relapse and rehospitalization in schizophrenia; *American psychiatric association*; 2004;78-94.
- xlv. Wiley-Blackwell (2010). Changing family behavior helps schizophrenic patients avoid relapse. *Science Daily*; 2010, November 12.
- xlvi. Woo, S. M., Goldstein, M. J., & Nuechterlein, K.H. (2004). Relatives' affective style and the expression of subclinical psychopathology in patients with schizophrenia. *Family Process*, 43, 233–247.