Variables in Expressed Emotion Associated with relapse: A comparison between depressed and schizophrenic samples in an Egyptian Community

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Abstract

In order to understand the cultural aspects of family Expressed Emotion EE, a comparison was made between two different samples one included 32 depressed the other 60 schizophrenic patients with 2 research teams using the same research design and one qualified rater for EE. The level of criticism and hostility predicted relapse in both groups. Unexpectedly emotional overinvolvement and positive remarks were significantly associated with relapse in depressed but not in schizophrenic patients. Compared to Western studies the level of criticism and hostility that predicted relapse in both groups is significantly higher. Within the subtypes of each sample, bipolar depressed patients relapsed less than unipolar while the type of schizophrenia was irrelevant to relapse. Family expressed emotion, mainly criticism and hostility seems to be an independent risk factor for relapse. Intercultural issues are discussed. Need for less time consuming tools to measure expressed emotion is emphasized.

Introduction: Families play an important role in the prognosis of many mental and even physical illness. In this respect the concept of expressed emotion has gained respectable ground in the last two decades and is considered among the most thoroughly investigated psychosocial research tool in psychiatry (Jenkins and Karno, 1992). It includes five components: criticism, hostility, emotional overinvolvement and warmth and positive remark. Many studies have found that expressed emotion is a risk factor amenable for intervention. This construct has been considered to be heavily laden by cultural factors in a way that any clinical application cannot be implemented without thorough investigations in each particular culture in heterogeneous groups of patients. The aim of the work is to test the generalizability of the tool and how it differs interculturally, and to what extent its components can effect relapse in major mental illness, namely depression and schizophrenia.

Subjects and Methods : Two separate studies were conducted on a sample consisting of two groups of patients using the same research design and one qualified rater for expressed emotion.

The first sample consisted of 32 depressed patients satisfying DSM III R criteria for major affective disorder. Among those, 22 were unipolar and 10 were bipolar depression. The subjects mean age was 43.2 years (SD=13.3). The mean number of family members was 4.4 (SD = 2.2). Patients consisted of 16 males and 16 females, mostly skilled or semiskilled workers and 2/3 were married. Diagnosis and follow-up were performed by a team of clinicians in Ismailia and Cairo led by Dr. Okasha (Okasha et al, 1992).

The second sample were schizophrenics. The team was led by Abdel Azeem et al (1993) at Kasr El Aini, admitted to psychiatric units (n=42) and Maadi sanitarium (n=18). Those patients were re-

cruited consecutively from subjects fulfilling DSM III R criteria for schizophrenia. Age ranged between 15 and 40 years with a mean of 27.6 (SD= 5.7). The mean number of family members was 6.4 (SD= 2.3), 56.7% were employed. The diagnosis and follow-up were performed by qualified clinicians in Kasr El Aini hospitals.

Procedure: An Arabic version of Camberwell Family Interview (Brown and Rutter, 1966; Rutter and Brown. 1966)which assesses expressed emotion (EE) was developed by the author and administered to all adult family members who lived continuously with the patients during at least the last 3 months. Rating of the depressed and schizophrenic study groups was performed by two raters, the author and Karen synder from UCLA with an interrater reliability of 0.86 .

All patients in the two groups were followed up in the outpatient clinic after recovery from the episode for 9 months. During this period the patient was scheduled to visit the clinic once a month for assessment of relapse which was defined as the return of symptoms satisfying the full syndrome criteria of DSM III R.

Compliance to drug treatment was assessed separately through a self report of the patient, his close key relative and the clinician in charge drug was supplied to all patients free of charge.

A patient was considered a drop out if he fulfilled any of the exclusion criteria during the 9 months period or if he failed to be assessed more than 3 months wither due to "no show" at the hospital or failure at home contact. There were 8 drop outs in the depressed group and 16 drop outs in the schizophrenic group and both were not included in the statistical procedures.

Statistical analysis was done (with statgrpahics computer software) by using simple significance tests, students tests, Fisher exact tests. The relative risk was calculated as a measure of the association between exposure to a particular risk factor and a risk of certain item $P<0.005$.

Results: There were no significant differences between those who relapsed and those who did not in the 2 clinical groups in regard to age, sex, professional level, family size or martial status.

Table (1) shows family expressed emotion scales in the depressed and the schizophrenic group in patients who did or did not relapse. In both groups, patients who relapsed had a statistically significant higher level of criticism, hostility and less family warmth according to expressed emotion scales. In this context the depressed group of patients were subjected to more criticism level compared to the schizophrenic group (10.5 ± 5.9 vs 7.1 ± 5.2). The same is true of hostility level (0.94 ± 0.94 vs 0.6 ± 0.7). Family emotional over involvment was significantly higher in the relapsers compared to the non relapsers in the depressed group (2.5 ± 1.66 vs 10.7 ± 1.44). This did not hold true in the schizophrenic group where the difference between relapsers and non relapsers was statistically insignificant. The same phenomenon extends to the positive remarks level where it was significantly related to relapse in the depressed but not in the schizophrenic group.

Table (2) Shows the relation between degree of family criticism and relapse in the depressed and schizophrenic groups at various cut off points. As can be seen every cutoff point from 3 to 8 on the criticism scale was significantly associated with relapsed in the depressed and the schizophrenic groups. At criticism level less than 2 cut off point there were sig-

Table (1) Comparison between fmily scores on Expressed Emotion Scales for 32 Egyptian Depressed and 60 Schizophrenic patients who did or did not relapse during 9-months follow-up.

Scale of Camberwell Family Interview	Relapsers Depressed N=18 Schizophrenia N=26		Non-Relapsers Depressed N=14 Schizophrenia N=34		t	P
	Mean	SD	Mean	SD		
Criticism in						
Depressed	10.50	5.9	3.5	2.4	4.15	<0.0003
Schizophrenis	7.1	5.2	1.8	2.2	5.24	<0.0001
Hostility in						
Depressed	0.94	0.94	0.36	0.50	2.12	<0.04
Schizophrenis	0.6	0.7	0.1	0.2	3.99	<0.001
Emotional over involvment in						
Depressed	2.50	1.33	10.7	1.44	2.90	<0.007
Schizophrenis	2.50	1.5	2.2	1.1	0.95	<0.017
Warmth in						
Depressed	2.33	1.19	3.21	0.70	2.46	<0.02
Schizophrenis	2.20	1.10	3.30	0.90	4.12	<0.001
Positive remarks in						
Depressed	1.28	1.01	2.36	1.22	2.73	<0.01
Schizophrenis	1.4	1.9				

nificant association between relapsed and criticism in the schizophrenic group but not in the depressed group (relative risk 3.7 at p=0.05 vs. 2.2 at p =0.38). The highest relative risk for both samples were at criticism level of cut off point 7.

There were no significant relation between level of expressed emotion and the type of schizophrenia or the relapse rate (p=0.60). On the other hand in the depressed group, bipolar patients tolerated higher criticism (mean=4.9, SD=2.7) than unipolar patients (mean 2.1, SD= 1.8) at p<0.03.

Discussion: This correlative study highlights the consistency of our results and earlier research in other countries (Vaughn et al 1984; Montero et al, 1992 and Bertrando et al, 1992) Egyptian depressed and schizophrenic patients living in families with high expressed emotion are at greater risk of relapse compared to similar patients living in families with low expressed emotion. It seems reasonable to postulate that the expressed emotion construct and its applications cuts across various cultures. Since depressed

Table (2) Relation between degree of Family Criticism and Relapse Rate for 32 depressed and 60 schizophrenic Egtptian patients

Score for Critisim Cutoff from Camberwell family interview	Depressed group (n=32)		Schizophrenic group (n=60)	
	Relative risk	P	Relative risk	P
2	2.2	0.38	3.7	0.05
3	10.7	0.008	7.7	0.005
4	9.0	0.008	8.8	0.0003
5	6.5	0.02	12.9	0.0001
6	12.0	0.004	26.6	0.0001
7	20.4	0.002	38.5	0.0001
8		0.0007	14.6	0.003

individuals as well as schizophrenic patients relapse more frequent in the presence of high expressed emotion families, one could also hypothesize that expressed emotion is a measure of an independent risk factor inherent in certain families and not a character or a reaction to depressed or schizophrenic individuals. This is also supported by the finding that the type of schizophrenia was not instrumental in affecting the level of expressed emotion. This independent risk factor, i.e. family expressed emotion could well be an important contributing factor to other family related mental and probably physical disorders. In fact Akabawi and his group (1995, personal communication) are investigating with the author the role of high expressed emotion families on the occurrence and timing of relapse in patients with substance abuse disorders.

Another finding of this study is that depressed individuals were subjected to higher criticism compared to schizophrenics. This could be due to the different perception of mental disorders in our culture. Schizophrenia could be perceived as a kind of "madness" or " qualitative change" that deprives someone from his mind it is an uncontrollable state which invites pitty. This is consistent with Fakher el Islam (1979) idea of high tolerance of Eastern families. On the other hand, depression may be seen in a different way, the decreased drive and energy may be considered as a lack of self-discipline. In decisiveness may be viewed as "weak personality". Depressed persons are viewed sometimes as " boring personality" deserving more criticism to shake them from the inside" as one family member described it.

Bipolar patients, unexpectedly, tolerated more criticism than unipolar patients. According to Okasha (1994, personal communication) this could be attributed to the low cost of maintenance therapy with lithium compared to the antidepressant medication, specially the new selective serotonin Reuptake Inhibitors

(SSRI's).

But still, compared to Western studies, both depressed and schizophrenic patients relapse at higher level of criticism. It seems that there is a certain amount of ""normal" or " benign" criticism which is culturally accepted to which individuals are habituated. It may need a substantially higher level, compared to Western culture, to constitute a "threat".

Contrary to initial expectation, the best cutoff point of the schizophrenic sample was similar to the depressed group. Most Western studies have found higher level for schizophrenic compared to depressed patients. One tend to think this may be due to the nature of the sampling procedure. most of the schizophrenic sample were chronic inpatients with a history of multiple hospitalization in a way that less than expected criticism level is sufficient to cause relapse.

One interesting finding is that, unlike depression, positive remarks, the fifth component of expressed emotion) was not significantly related to protection against relapse in schizophrenic patients. This is consistent with Leff and Vaugher (1985) view that the most important components of expressed emotion construct that predict relapse are the criticism, hostility and emotional overinvolvement.

One last unexpected finding is the lack of association between motional overinvolvement and relapse in schizophrenic patients and its presence in the depressed. This is contrary to our understanding of the psychopathology of and family dynamics in schizophrenia. It seems that this " classical" family structure does not play a pivotal role in many family settings specially in susceptible individual with deficient biology or "wiring". Nevertheless it could be considered good news for intervention since families with high emotional over involvement are much difficult to change with family therapy or psychoeducational programs compared to families with high criticism or hostility.

At last this correlative study points to the robust link between family environment and relapse. Living in certain family atmosphere could be sometimes a " blessing" and in other time "a burden". Expressed emotion could be a powerful predictor to relapse.

One obstaacle or further studies in expressed emotion is that it is time consuming in a way that newer and shorter tools are needed. In this respect the relatively new tool developed by Cole and Kazarian (1988) which was adapted to Arabic by Okasha and Kamal (1995) is one effort in this direction.

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المتغيرات فى التعبير عن الانفعال المصاحب للانتكاس : مقارنة بين عينة إكتئاب و فصام فى بيئة مصرية

اجريت مقارنة لفهم الجوانب الحضارية لتعبير الاسرة عن الانفعال بين مجموعتين من المرضى فى دراستين منفصلتين استعملتا نفس المنهج البحثى و مقيم واحد مؤهل لقياس التعبير عن المشاعر فى الأسرة. كانت المجموعة الاولى مكونة من ٣٢ مريضا مكتئبا و الثانية من ٦٠ مريضا بالفصام. وقد وجد ان مستوى النقد و العدوانية له علاقة ذات دلالة بالانتكاس. و على عكس المتوقع لم يكن زيادة التورط الانفعالى عاملا ذو دلالة لدى مرضى الفصام. و بالمقارنة مع الدراسات الغربية فان معدل النقد و العدوانية كان أعلى . و فى داخل كل مجموعة فان مرضى الإكتئاب ثنائى القطب انتكسوا بدرجة أقل من مرضى احادى القطب بينما لم يؤثر نوع الفصام فى معدل الانتكاس.

يبدو أن تعبير الأسرة عن الانفعال و بالذات النقد و العدوانية هو عامل مستقل ينذر بحدوث الانتكاس. و تمت مناقشة الفروق الحضارية مع التأكيد على الحاجة لاستنباط ادوات أقصر لقياس التعبير الانفعالى.