© Journal of the Indian Academy of Applied Psychology
Jan 2016, Vol. 42, No. 1, 172-178

Relationship of Burden and Social Support with Expressed Emotion in Spouses of Persons with Schizophrenia

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Caregivers of persons with schizophrenia experience substantial burden of care, which adversely affects their psychosocial functioning. Burden of care is also linked with increased expressed emotion in the caregivers. The expressed emotion is one of the key variables that increase the probability of relapse in psychiatric patients. The present study is focused on the spouses of married patients to understand the magnitude of burden and its correlations with expressed emotion including the role of social support in burden and expressed emotion. 100 schizophrenic patients were sampled from psychiatric facilities in Agra (India). Following tools were individually administered on the caring spouses of the patients (a) Burden Assessment Schedule by Thara et al, (b) Family Emotional Involvement and Criticism scale by Shields et al, (c) Social Support Questionnaire by Nehra et al. The results of correlation indicated that (i) Burden of care has significant and positive association with expressed emotion (ii) Burden of care and social support have an inverse relationship (iii) Social support and expressed emotion also have an inverse relationship (iv) Burden of care is significantly related with expressed emotion even when the factor of social support is controlled. The results demonstrate the importance of providing psychosocial support to the spouses of psychiatric patients in order to reduce their burden of care and decrease the probability of relapse resulting due to expressed emotion.

Keywords: Schizophrenia, Caregivers' burden, Expressed emotion, Relapse in Schizophrenia, Social Support, Families of Persons with Schizophrenia.

Most patients with psychiatric disorders live with their families. The patients' symptoms, impaired psychosocial and occupational functions adversely affect the wellbeing of the family members. The behaviors of the family members, their interactions and expectancy from the patients, in turn affect the patients' mental status. The family members may be supportive and help in the treatment and restoration of the functions of the patients or be critical to the patients' behaviors and compromised psychosocial status due to illness.

An interaction pattern within the family environment reflecting the amount of criticism and emotional over-involvement expressed by a key relative towards a family member with a disorder or impairment is labeled as Expressed Emotion (Hooley, 2007), which has high potentials for causing relapse. Three specific components have been delineated in Expressed Emotion – (a) criticism (b) hostility, and (c) emotional over-involvement.

The role of expressed emotion (EE) in relapse was recognized as early as in 1950s by the seminal work of George Brown. In 1956, he observed that when symptomatically stable and functionally recovered schizophrenic patients were discharged from psychiatric unit on maintenance antipsychotic medication, many of them got readmitted soon due to relapse. To understand the basis of relapse, George Brown and his colleagues, initiated a study on 229 male patients, of them 156 had a diagnosis of schizophrenia (Leff, 2000). From this study, they observed that the strongest link between relapse and readmission was the type of home to which the patients were discharged. The patients who lived with their parents or wives were likely to

relapse more than the patients who lived in lodgings or with their siblings. It suggested that the contacts with their families had adverse influence on the degree of disability and the level of functioning of the patients (Brown, 1985).

Later, researchers also testified that the 'emotional climate' of the families of psychiatric patients do predict relapse. In a meta-analysis of 27 studies, it was reported that the mean effect size of the EE-relapse relationship was r=.31 (Butzlaff and Hooley, 1998). Most recent researches also revealed that 71.4% of the patients who experienced clinical worsening were coming from high EE families. The course of the illness was better in the group of patients whose family members had low expressed emotion (Bogojevic, Ziravac and Zigmund, 2015). Haobam, Lenin, Ningombam and Mohanty (2013) also came to the similar conclusion that a family atmosphere characterized by negative interactions not only increases the probability of relapse and re-hospitalization but, also has a significant impact on the course of the illness. Family intervention researches provide stronger evidence in support of a causal role of EE in relapse. When family levels of criticism, hostility and emotional over-involvement are decreased through behaviorally oriented family treatment, the patients show a better response than the comparison group without such treatment (Hooley and Gotlib, 2000).

Jackson, Smith and McGorry (2007) reported a relationship between level of expressed emotion and level of family burden in families of individuals with psychotic disorder. Metwally, Mahgoub, Othman and El-Kayal (2008) also found that there were highly significant and positive correlations between expressed emotion, family burden and stigma of mental illness. The relationship between burden and EE was also established in one of the most cited study by Scazufca and Kuipers (1996). However, Nirmala, Vranda and Reddy (2011) did not find any significant relationship between burden and EE in caregivers of schizophrenic patients. Most studies to date on burden and expressed emotion are done on the caregivers as a whole. In married persons, the spouses are affected more than any other family member. There are only a few studies, which explored the expressed emotion and burden in spouses of married patients. A study by Mohanty and Kumar (2013) was conducted on the spouses of schizophrenic patients, which reported a significant correlation between burden of care and expressed emotion. The available literature on burden and expressed emotion suggests a positive link between burden of care and expressed emotion and relapse, which is explained with the stress-diathesis model. Research supports a stress-diathesis model of psychosis in which environmental stressors, including stress within intrafamilial relationships, interact with biological factors, triggering the onset of the illness and a recurrence of symptoms (Walker and Diforio, 1997). Social support has a protective function for the families in distress. When a member of family develops psychiatric illness, the caregivers initially look forward for a support from other family members and then to friends and relatives. When support is available, the caregivers can handle the situation more efficiently and if there is a lack of such support, then it raises their distress level. However, with continued illness the support system can decrease leaving the caregivers and family members to deal with the situation by themselves. Family members may also seek support from other families having similar problems. They can also participate in support and self-help groups. The participation in such groups can reduce social isolation and provide opportunities for gaining more knowledge about the problems and methods of handling. They also get emotional support from families having such patients. This enhances their confidence in care giving (Saunders, 2003). McCorkle (2007) reported that caregivers' social support was associated with better family functioning and improvement in schizophrenic patients while the absence of social support resulted in impaired family functioning and increased psychopathology in the patients. Social support is considered to be of great value and a best predictor of caregivers' burden (Chien, Chan and Morrisey, 2007). Magliano et al. (2003) reported that a supportive social network was found in relatives who reported lower levels of burden and pessimism about schizophrenia.

The caregivers including spouses of schizophrenic patients experience burden of care (Srivastava, 2005; Kumar, Singh and Mohanty, 2005; Kumar and Mohanty, 2007; Kumar Kumar, Singh, Mohanty, and Kumar, 2008; Kumar, Jain, Mohanty, and Uma Rani, 2008; Kumar, Uma Rani, Jain, and Mohanty, 2009; Kumar, Jain, Uma Rani, and Mohanty, 2010). The burden of care adds to the level of Expressed Emotion (Jackson, Smith and McGorry 2007; Metwally et al. 2008; Scazufca and Kuipers, 1996; Mohanty and Kumar, 2013). Social support reduces the level of burden (McCorkle, 2007; Chien, Chan and Morrisey, 2007; Magliano et al. 2003). If it is true, then social support may reduce both burden of care and expressed emotion. In view of this, the present study was designed with the following objectives:

Objectives

1. To explore the relationship between burden of care and expressed emotion in spouses of persons with schizophrenia.
2. To explore the relationship between burden of care and social support in spouses of persons with schizophrenia.
3. To explore the relationship between social support and expressed emotion in spouses of persons with schizophrenia.
4. To explore the relationship between burden of care and expressed emotion by controlling social support.

Method

Sample

Schizophrenic patients visiting the Institute of Mental Health and Hospital, Agra with their spouses constituted the study population. A sample of 100 spouses of chronic schizophrenic patients was drawn through purposive sampling. The schizophrenic patients presenting along with their spouses in OPD and Family Ward of IMHH were screened on the following inclusion/ exclusion criteria. They were briefed about the study and those who gave their consent were included.

1. The patients of schizophrenia were diagnosed as per ICD-10 Classification of Mental and Behavioral Disorders.
2. Age range of patients and spouses ranged from 21-55 years.
3. The patients having minimum two years of continuous illness were selected.
4. The spouses having minimum two years of exposure to spousal illness were selected.
5. Spouses having history of substance abuse or major medical illness were not included.

Tools

1. *Personal Data Sheet was used* for recording identifying information as well as clinical information of patients and spouses.
2. *Family Emotional Involvement and Criticism Scale (FEICS):* This scale was developed by Shields, Franks, Harp, McDaniel and Campbell (1992). The scale assesses two dimensions of Expressed Emotion viz. Emotional over-involvement (EOI) and Perceived criticism (PC) in the family. It is a 14 item, 5-point Likert-type scale, which includes following response options: (1) almost never (2) once in a while (3) sometimes (4), often (5) almost always. High scores on the scale indicate greater level of PC and EOI. Cronbach's alpha for PC is .82 and for EOI it is .74.
3. *Burden Assessment Schedule (BAS):* The schedule was developed by Thara, Padmavati, Kumar and Srinivasan (1998). It has 40 items, which are rated on three point scale. The reliability is .80. The validity ranges from .71-.80.
4. *Social Support Questionnaire (SSQ):* Social Support Questionnaire was adapted by Nehra, Kulhara and Verma (1996). It has 19 items, which measure social support as perceived by the subjects. The total score indicates the amount of perceived social support. Test-retest reliability after two weeks of interval on 50 subjects was 0.59.

Procedure: After determining the inclusion/ exclusion criteria and obtaining the consent from the patients and their spouses, above tools were

individually administered by the first author on the participants. The tools were administered on maximum two participants in a day.

Statistical Analysis: The data were processed through Statistical Package for Social Sciences (SPSS) for computation of Mean, S.D., and Correlation Coefficients.

Results

Table-1. Mean and S.D. of Sample Characteristics

		Mean	Std. Deviation
Age (in years): Spouse		36.33	7.11
Education (in years): Spouse		05.90	5.24
Duration of Marriage		17.26	7.27
Duration of Exposure to Spousal Illness		10.06	6.06
Frequencies of Sample Characteristics			
Spouses' Gender	Male	40	
	Female	60	
Socio-economic Status (SES)	Low	56	
	Middle	44	
Family Type	Nuclear	73	
	Joint	27	
Domicile	Rural	65	
	Urban	35	

Table-1 reveals that the mean age of the spouses, which was 36.33 (S.D.=7.11) years. The mean of years of education of was 5.90 (S.D.=5.24) years. The mean duration of marriage was 17.26 (S.D.=7.27) years and the spouses were exposed to the spousal illness for a mean duration of 10.06 (S.D.=6.06) years. 60% spouses were female and 40% were males. 56% were from low SES and 44% from middle SES. 73% spouses hailed from nuclear families and 27% from joint families. 65% spouses belonged to rural areas and 35% from urban areas.

Table-2 reveals that both the dimensions of expressed emotion (a) FEICS: perceived criticism and (b) FECIS: emotional over-involvement has a significant, negative correlation with social support; whereas, these two dimensions have a significant, positive correlation with burden of care. Burden of care is negatively associated with social support.

Partial Correlation Coefficients were computed between two dimensions of FEICS (a) Perceived Criticism (b) Emotional Over-involvement vis-à-vis Total BAS Scores. The results revealed that BAS Total Scores and Perceived Criticism have a coefficient of .42 significant at .01 level and Total BAS Scores and Emotional Over-involvement have a coefficient of .12, significant at .05 level indicating that even though social support has a negative correlation with expressed emotion but, it does not regulate expressed emotion to the full extent.

Discussion

Expressed Emotion (EE) is linked to high rates of relapse in psychiatric disorders. There can be an array of factors like burden of care, family problems, marital discord, financial problems, personality attributes, severity and chronicity of the disorder, which can contribute to high rates of EE. In the present study, two variables (a) Burden of care and (b) Social support were chosen to explore their relationship

Table-2. Mean, S.D. and Correlation Coefficients of Measured Variables

Measures	Mean (S.D.)	FEICS: Perceived Criticism	FECIS: Emotional Over-involvement	SSQ Scores	BAS: Total
FEICS: Perceived Criticism	19.42 (6.77)	1	.845**	-.923**	.877**
FECIS: Emotional Over-involvement	19.16 (5.36)		1	-.778**	.734**
SSQ Scores	45.12 (12.75)			1	-.862**
BAS: Total Scores	80.06 (18.13)				1

** Correlation is significant at the 0.01 level

with expressed emotion in spouses of persons with schizophrenia.

Burden of Care and Expressed Emotion

The results revealed a positive and significant association between burden of care and EE. These results are in the expected direction. The illness in patients adds to multiple additional demands on the care taking spouses. It involves taking care of the ill spouse, dealing with both positive and negative symptoms, handling relapses, periodic psychiatric evaluation and treatment, frequent travel to the treatment facility, costs of treatment, financial issues because of reduced income due to illness in earning spouse, shouldering domestic responsibilities, sleep disturbances due to the disturbances created by the patients' behaviors, physical strain on the caring spouses, stigma and blaming on caring spouses. The burden caused by these factors leads to vulnerability and emotional reactions in caring spouses. The caring spouses are more likely to be over-involved with the patients and overtly criticize the patients' actions and behaviors. The expressions like 'you are not earning', 'my life has become a hell with you', 'my life is ruined', 'I am not at peace', 'I cannot even sleep properly' and so on can be observed in families of psychiatric patients. The results are in agreement with the findings of Scazufca and Kuipers (1996) and Metwally et al (2008) who observed a positive link between caregivers' burden and EE. However, Nirmala, Vranda and Reddy (2011) failed to observe any association between burden and EE. They reasoned that most of the patients in their study were functional and had been attending the daycare center regularly.

Since, expressed emotion is linked with high rates of relapse, and burden of care is one of the primary determinants of expressed emotion, adequate psychosocial intervention is warranted even for the family members apart from the intervention with the patients. The models of psycho-education have emerged as promising forms of supportive therapy that educates the family members on the nature, cause, management, relapse, the relapse prevention and rehabilitation needs of the patients. These models also aim at clarifying myths regarding psychiatric illness and reduce the stigma amongst the family members and provide guidelines to the family members for management of their own emotional reactions. These forms of intervention have been demonstrated as effective in reducing burden of care, expressed emotion, better management of the patients and reduced rate of relapse (Tarrier et al., 1988; Leff et al., 1990).

Social Support and Burden of Care

The results indicate that Burden of care and Social Support have a significant and negative correlation coefficient. Social Support has a significant role in the mitigation of the burden of care. The results are in agreement with the observations of Jagannathan, Thirthalli, Hamza, Nagendra and Gangadhar (2014) who reported that perceived social support had significant inverse correlation with total burden score in family caregivers of the persons with schizophrenia. They also found that duration of illness and perceived social support were significant predictors of burden in addition to psychopathology and disability. Kaur (2014) also observed a negative and significant correlation between social support and caregivers' burden in schizophrenia. It is postulated that social support serves as a protective factor that facilitates coping and competence and modulates the deleterious effects of social and environmental stressors.

Social Support and Expressed Emotion

Social support from family members, friends, relatives and community members provide strength to the suffering individual to handle the adversities with lesser stresses. It might be postulated that social support plays an important role in expressed emotion. Social support reduces burden of care and the decreased level of burden results in lowered rate of expressed emotion. The results revealed that social support has inverse relationship with both burden of care and expressed emotion. Social Support effectively protects the caregivers from burden of care and potentials of excessive criticism of the patients, expression of anger and getting over-involved with the patients.

Social support is hypothesized to act at two different levels in the causal chain linking to stress (Cohen, 1988). (i) Social support may intervene and modify the stress appraisal response. The grounding that others are available to provide

necessary support and resources helps in redefining the magnitude of harm and one's ability to cope with adverse situations. (ii) Social support intervenes between the experience of stress and the onset of the pathological outcome by influencing physiological processes by tranquilizing the neuro-endocrine system, which reduces the reactivity to perceived stress and facilitates healthy behaviors (House, Landies and Umberson, 1988).

The results also revealed that Burden of care does result in expressed emotion even when the factor of social support is controlled. It shows that social support although, reduces the magnitude of burden but, it does not completely eliminate the expressed emotion. There is no one to one relationship between social support and burden of care. There are other factors, which influence both burden of care and expressed emotion. Factors like stigma, functional status of the patients, financial difficulties in the family, chronicity of the illness, nature of symptoms, extent of disability, etc. could also be responsible for the burden of care and expressed emotion. More research work is needed to catalogue the factors contributing to the burden and expressed emotion in spouses of persons with schizophrenia.

Conclusion

Caregiver burden is an important issue in the management and rehabilitation of the persons with schizophrenia. The burden of care adversely affects the caregivers but, also the patients. It is significantly associated with expressed emotion. For relapse prevention, we need to address the presence of expressed emotion in caregivers. While dealing with the issue of expressed emotion, we need to consider the role of social support and burden in influencing the level and magnitude of expressed emotion in the family members. Recent studies provide good support for intervening with the family members through models of psycho-education. It should become an integral part of the management of the persons with schizophrenia. In married patients, specific attention should be paid to the needs, stresses, limitations, and resources in the form of social and financial support available to the spouses to meet the management and rehabilitation needs of the patients as well as to address their own emotional and psychosocial needs.

The study, however, has limitations of sampling technique. The sample was drawn from urban facilities in one city only, which limits the generalization of the findings.

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Manuscript received on 8th July 2015
Final revision received on 6th October 2015
Accepted on 12th October 2015.

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