# LIFE EVENTS AND SOCIAL SUPPORT IN MARRIED SCHIZOPHRENICS

## PARMANAND KULHARA, AJIT AVASTHI, NITIN GUPTA, MRIGENDRA K. DAS, RITU NEHRA, A. SHEKHAR RAO & GAGANDEEP SINGH

## ABSTRACT

Life events are associated with relapse in schizophrenia. However, the role and interplay of marriage and social support have not been explored in research on schizophrenia, especially stable patients. Life events and social support were assessed in two groups comprising 30 married and an equal number of unmarried patients of schizophrenia. The time frame for these assessments was a period of 6 months prior to such evaluation. The married group reported higher stress score and greater number of undesirable life events. Negative correlation was present for social support with number of undesirable life events in the sample as a whole. Hence, it is concluded that marriage leads to experiencing more stress but there are other psychosocial variables mitigating the same and preventing relapse.

#### Key Words : Life events, social support, schizophrenia, married

Life events have been defined as those whose advent is either indicative of/or requires significant change in the ongoing life pattern of the individual' (Holmes & Rahe, 1967), Life event research continues to be an area of active work for understanding the aetiology, development or relapse of psychiatric disorders. Major efforts have been directed at finding the role of life events in the evolution of depressive illness (Paykel et al., 1969; Brown & Harris 1978) and schizophrenia (Brown & Birley 1968; Al Khani et al., 1986; Chung et al., 1986). Norman and Malla (1993a) in a review pointed out presence of a relationship between life events and changing symptomatology over time in patients of schizophrenia. However, there is no strong evidence for higher levels of stress in schizophrenics as compared to general population and other psychiatric disorders, it, there-

fore, appears that other psychosocial variables have a role in the causation, course and outcome of schizophrenia. Indirect evidence is available from studies that show improved outcome of schizophrenia patients who received structured psychosocial interventions (Falloon et al., 1985; Hogarty et al., 1986).

Various psychosocial variables like coping; family burden and social support contribute to the understanding of the natural history of schizophrenia. In the interactive models of schizophrenia, social factors are believed to have a role in formation, expression, maintenance and outcome of the illness, Here social support is postulated to serve as a protective factor with health-sustaining functions (Buchanan, 1996). Studies show that social support has buffering effect against stress (FacCinani et al., 1990; Gilles et al., 1993). In fact, Buchanan (1996) described an interactive framework between social support and schizophrenia and has shown that enhanced social support leads to benign and manageable interpretation of stressors. Hence, it seems that life events (as forms of stress) can be modulated by social support.

Although social support is also viewed as the presence of social network (Heller et al., 1986); yet the relationship is not that simple i.e. bigger the social network, better the social support. This is especially so when the family network of a schizophrenia patient is considered. Family environment, in the form of expressed emotion, has been found to be an important predictor of relapse (Brown et al., 1972; Leff et al., 1987; Wig et al., 1987). Family environment measures also have a possible role in the course of schizophrenia (Norman & Malla, 1993-b). Wig et al. (1987) reported higher levels of expressed emotion in urban families as compared to rural families. Though their hypothesis of this being due to different family setup (extended than nuclear) and more family members in the rural families leading to dispersed emotions through the family network was not confirmed on analysis of the results obtained, yet it appears to be an interesting observation. An extrapolation of this could be that married schizophrenics may also be experiencing different levels of stress as compared to the unmarried ones due to different social networks and type of families.

Exploring life events in married schizophrenia patients, Al Khani et al. (1986) reported a higher frequency of events in married female schizophrenics in the 6-month period preceding assessment. There was additional presence of event clustering in the 3 week period before onset of last episode of illness in the same subgroup. A similar observation was made by Gureje & Adewunmi (1988) that married females reported a higher rate of life events. A recent study by Das et al. (1997) had reported higher levels of stress and higher number of life events, in the one-year preceding relapse, in relapsed schizophrenics as compared to stable schizophrenics. On subjecting the data to multiple regression analyses, Das et al. (1997) reported that the variable of marriage accounted for only 3.08% of the total variance with 'relapse' classed as a dependent variable.

However, the issue of intervening psychosocial variables has not been addressed to in the above mentioned studies. Hence, it becomes difficult to interpret the role of stress per se in causing onset of illness. Additionally, none of the studies were carried out on stable patients solely so as to address the issue of role of life events in such a group. Also the role of social support in acting as a buffer against life events has not been studied.

This study was planned to address the above mentioned issues. The relationship among marriage, social support and life events were also investigated.

## MATERIAL AND METHOD

The sample of patients for the study was drawn from the population of patients attending the outpatient service of the Department of Psychiatry of PGIMER, Chandigarh in the years 1995-96.

Subjects and diagnostic criteria : By 'purposive sampling' two group of subjects were selected. One group consisted of 30 stable married schizophrenics and the other group consisted of 30 stable unmarried schizophrenics. All patients were in the age group of 20-45 years.

The diagnosis of schizophrenia was according to ICD-10 (World Health Organization-WHO, 1992). Presence of post-schizophrenic depression and other comorbid psychiatric illness, epilepsy, alcohol and drug abuse served as exclusion criteria.

Included in the 'married' group were those patients who had (i) been married at least one year prior to the onset of schizophrenic illness and (ii) the spouse had been living with the patient for at least one year preceding assessment.

Stability criteria : 'Stability' was defined as absence of symptom exacerbation requiring increase in neuroleptic dosage by fifty percent or more for a period of 6 months preceding the assessment.

Design of the study : The study had a crosssectional design with assessment of life events and social support in a period of six months preceding the date of intake into the study,

Assessment of life events : The patients along with a key informant was interviewed on a life event inventory and the events were recorded. A key informant included in the study was an informant of more than 18 years of age, who was free from any physical or psychiatric disorder and had been staying with the patient for at least six months prior to current assessment. This was done to enhance the reliability of the information. However, it should be emphasised that patient and the key informant were interviewed together and not independently.

Assessment instruments : (a) The Presumptive Stressful Life Events Scale (PSLES) of Singh et al. (1984) was the principal instrument for the assessment of life events. This instrument was constructed and standardised for use in the Indian population and was developed in this part of India. It is an inventory type of life events scale and consists of 51 items; each item has a weighted stress score. The items can be further divided into (i) desirable events, (ii) undesirable events; and (iii) ambiguous events or as (i) personal and (ii) impersonal types. The scale in easy to administer to both literate and illiterate subjects. It is administered in a semistructured interview form and on the basis of the responses, the events are assessed to be either present or absent. This scale of life events is extensively used in psychiatric research in India and has been used in a variety of psychiatric diagnoses. The scale does not have any provision for determining the independence of reported life events with regard to symptomatology i.e. it is not possible to differentiate whether or not a particular life event is arising because of symptomatology. It is also worth mentioning that the summated weighted stress score of reported life events give a total stress score.

(b) The Social Support Questionnaire by Nehra & Kulhara (1987) was used for assessing psychosocial support in patients. This scale has 18 items. Each item has four response options, which range from 'no agreement' to 'total agreement'. Seven of the items are positively worded and 11 are negatively worded. Higher score indicates that more social support is available to the patients. This scale is in simple Hindi and the authors have found it to be reliable and valid in the Indian situation.

Data analysis : For comparison of means, Student's t-test was performed. For nonparametric variables, chi-square was performed. To assess the relationship between variables of stress, social support and illness-related parameters; Pearson's correlational analyses were carried out.

## RESULTS

There were 30 patients each in the 'married' and 'unmarried' schizophrenic groups. There were no significant differences between these two group on variables such as occupation, religion, family type and locality. However, there were significantly more males in the 'unmarried' group compared with the 'married' group (n=22) and (n=14) respectively (X2=4.44; d.f.=1; p<0.05). Additionally; thirteen percent of the 'unmarried' group were educated below matriculation compared with fifty percent of the married group. Also, eighty percent of the 'unmarried' group belonged to low social class compared with only forty three percent of the 'married' group. With regard to diagnostic sub-type, both the group were comparable i.e. seventy percent of the patients were of paranoid subtype. These subgroups were also comparable on certain other clinical variables i.e. age at presentation, duration of illness, and duration of stability (Table 1).

On comparing the subgroups on variables related to stress and social support it was seen that social support was comparable. As regards the total stress scores and the number

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Variable	Married (N=30) Mean (S.D.)	Unmarried (N=30) Mean (S.D.)	t test (d.f.)
Age (in years)	36.57 (8.17)	26.67 (5.62)	5.468 (58) +
Duration of illness (in months)	83.00 (75.18)	76.37 (73.38)	0.346 (58)
Duration of stability (in months)	13.27 (13.00)	14.67 (17.72)	0.349 (58)
Social support score	50.30 (9.62)	47.70 (9.42)	1.058 (58)
Total stress (Life events) score	209.93 (167.64)	125.90 (82.54)	2.463 (58) *
Total no. of Life Events (LE)	4.77 (3.75)	3.07 (1.88)	2.222 (58) •
No. of Undesirable LE	3.00 (2.80)	1.67 (1.47)	2.307 (58) *
No. of Desirable LE	0.83 (1.62)	0.53 (0.90)	0.886 (58)
No. of Ambiguous LE	0.93 (1.41)	0.87 (0.97)	0.213 (58)
Stress score unrelated to marriage	106.07 (103.20)	125.90 (82.54)	0.823 (58)
LE unrelated to marriage	2.30 (2.04)	3.07 (1.87)	1.517 (58)
LE related to personal area	1.43 (1.59)	1.00 (0.95)	1.282 (58)
LE related to lifelihood	0.77 (1.10)	0.73 (0.98)	0.124 (58)
LE related to family	1.37 (1.33)	0.70 (0.95)	2.237 (58) *
Le related to social life	0.73 (0.87)	0.27 (0.45)	2.614 (58) •
LE - miscellaneous	0.47 (0.78)	0.37 (0.72)	0.518 (58)

TABLE 1 COMPARISON OF SOCIO-CLINICAL VARIABLES IN MARRIED AND UNMARRIED SCHIZOPHRENICS

\* p < 0.05

of life events experienced, the 'married' subgroup had these significantly more compared to the 'unmarried' subgroup. Patients in the 'married' subgroup also reported significantly more number of undesirable life events. These results are shown in table 1.

The 'married' subgroup had higher stress score due to presence of both marriage related and unrelated life events. The contribution of marriage related life events was 103.87 (SD=93.52); which on deduction from the total stress score of this subgroup yielded comparable values i.e. 106.07 (SD=103.20) with the 'unmarried' subgroup (Table 1).

In addition, the life event stress score was divided into various areas viz. social, personal, family, livelihood and miscellaneous. The 'married' subgroup had experienced significantly more number of life events in the social and family related areas (Table 1).

The data pertaining to the occurrence of life events in the two groups were analysed

using nonparametric tests (Chi-square). A greater number of overall life events were reported by the married subgroup (n=142) as compared to the unmarried sub-group (n=90). Life events # 1,2,5,9,21,22 of the PSLES were not endorsed by any patients of the two subgroups. Comparison of occurrence of life events in the two subgroups showed that life event # 7 (death of a close family member) was reported significantly more frequently by patients in married subgroup ( $X^2=4.706$ ; d.f.=1; p<0.05).

Thereafter, to test the hypothesis that marriage despite causing greater number of life events is associated with a better degree of social support the data were subjected to Pearson's Product Moment Coefficient of Correlation in which the correlations among social support and the stress score, number and type of life events was explored. This was carried out for both subgroups individually and in a combined manner as well. It was seen that significant degree of correlation was present

Variables	Married (N=30)	Unmarried (N≃30)	Total sample (N=60)
Social support & stress score	-0.230	-0.115	-0.151
Social support & no. of life events Social support & no. of undesirable life	-0.187	-0.081	-0.120
events	-0.299	-0.301	-0.253*
Social support & no. of desirable life events	-0.019	0.097	0.032
Social support & no. of ambiguous life events	0.118	0.210	0.152

TABLE 2 INTERCORRELATION OF SOCIAL SUPPORT SCORE AND STRESS-RELATED VARIABLES

\* p < 0.05

between social support score and number of undesirable life events in the combined sample (Table 2).

## DISCUSSION

The study groups comprising 'married' and 'unmarried' patients of schizophrenia were found to be comparable on various dimensions. The presence of more males in the 'unmarried' schizophrenics is in keeping with the sociocultural milieu of India to the extent that females tend to get married at a younger age compared to males. Higher level of education in unmarried schizophrenics could possibly be due to the presence of more males in the same group. This would then again be in keeping with the sociocultural milieu of India i.e. males getting chance for completing education as compared to females, because of the early age of marriage in females. The variation in social class distribution is difficult to explain.

Despite being stable subgroups, there was a predominance of the paranoid sub-type that was in contrast to the observation by Das et al. (1997) that relapsing schizophrenics were predominantly of the paranoid sub-type. Social support perceived by patients of both subgroups was comparable implying that rather than the number of family members, other factors like nature and degree of interaction amongst family members appear more relevant. However, this hypothesis could not be confirmed due to design of the current study.

Married schizophrenics reported higher levels of total stress score. This is in keeping with the results of Das et al. (1997). Additional findings of higher number of total life events and undesirable life events in the 'married' subgroup is in keeping with the earlier observations of researchers from the developing countries (Al Khani et al., 1986; Gureje & Adewunmi 1988; Das et al., 1997). However, there is a major difference in as much that the present study had 'stable' schizophrenia patients, whereas the studies referred to earlier had 'relapsed' patients. The higher degree of stress in 'married' subjects is due to the presence of marriage related life events. An enhanced and larger social network arising out of marriage may be leading to more stress and life events, as was evidenced by the presence of greater number of life events in 'social' and 'family' spheres in married subjects.

Despite experiencing higher stress, the 'married' subgroup did not experience any relapse in the year preceding assessment. As the perceived social support was comparable in both subgroups, it implies that there might be other psychosocial variables playing a role in the prevention of relapse, especially in the married subgroup. Numerous other psychosocial variables such as Expressed Emotions (EE), Quality of Life (QOL), coping etc. have been

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linked to the natural history of a schizophrenic illness. Therefore, it is possible that an important role is being played by these psychosocial variables in preventing relapse and mitigating excessive stress. However, due to the design of the current study in the context of marriage, it was not possible to test this hypothesis. A recent study by Thara & Srinivisan (1997) showed relationship of marital status with the course of the disorder to the extent that married patients showed remitting or stable pattern of course. Although this study cannot comment on this relationship, yet various variables contributing to stability in married schizophrenics need more evaluation (Murthy & Kumar, 1997). It should, however, be remembered that in the Indian setup, marriage for a common person is aimed at fulfilling one's social and religious obligations (Kapadia, 1972) and selective/ assortive mating as a function of marriage, as seen in the West, is not applicable in India. In as much this is concerned, it is difficult to conclude that in the Indian context marriage necessarily reflects the inherent stability of the patient to enter into such an alliance and maintain it.

Regardless of the marital status, social support in both groups was comparable. Also, there was no correlation between social support score and stress score/ number of life events in the combined and individual samples although a negative correlation between social support score and undesirable life events was visible. Therefore, it can be speculated that more social support leads to experiencing of lesser number of life events, and as such may be acting as a protective factor. However, such an interaction of social support and stress needs to be evaluated in greater details and till that time this proposition would remain speculative and tentative.

Overall, it appears that marriage leads to experiencing higher levels of stress without a corresponding increase in social support. Despite social support being a protective factor, it is not the only psychosocial variable of importance. As mentioned earlier, there is a need to study the influence of EE, quality of life, coping strategies etc. on stress and their relation to relapse or prevention of relapse in schizophrenia. In fact, EE apart from having a probable influence for relapse (Norman & Malla, 1993b), could be just as important a variable for stability. Hence, there is a need to study EE in schizophrenia patients, both stable and relapsed, to determine its effect on the status of the patient.

The role of marriage and gender in contributing to relapse also remains to be clarified with studies on larger samples. Inclusion of other psychosocial variables related to relapse might have yielded more conclusive results. Nevertheless, these findings do generate interest and need further research exploration.

## **REFERENCES**

Al-Khani, M.A.F., Bebbington, P.E., Watson, J.P. & House, F. (1986) Life events and schizophrenia : A Saudi Arabian study. British Journal of Psychiatry, 148, 12-22.

Brown, G.W. & Birley, J.T.L. (1968) Crisis and life changes and the onset of schizophrenia. Journal of Health and Social Behaviour, 9, 203-214.

Brown, G.W., Birley, J.T.L. & Wing, J.K. (1972) influence of family life and course of schizophrenia disorders : A replication. *British Journal of Psychiatry*, 121, 241-258.

Brown, G.W. & Harris, O.T. (1978) Social origins of depression. London : Tavistock.

Buchanan, J. (1996) Social support and schizophrenia : A review of literature. Archives of Psychiatric Nursing, 9, 68-76.

Chung, R.K., Langeluddecke, P. & Tennan, C. (1986) Threatening life events in the onset of schizophrenia, schizophreniform psychosis and hypomania. British Journal of Psychiatry, 148, 680-685.

Das, M.K., Kulhara, P. & Verma, S.K. (1997) Life events preceding relapse of schizophrenia. International Journal of Social Psychiatry, 43, 56-63.

FacCinani, C., Mignolli, G. & Platt, S.

(1990) Service utilization, social support and psychiatric status in a cohort of patients with schizophrenia psychosis : A 7 year follow-up study. *Schizophrenia Research*, 3, 139-146.

Falloon, I.R.H., Boyd, J.L. & McGill, C.W. (1985) Family management in the prevention of morbidity in schizophrenia : Clinical outcome of a two year longitudinal study. Archives of General Psychiatry, 42, 887-896.

Gilles, L., Wasylenki, D. & Lancee, W. (1993) Differential outcomes in social network therapy. *Psychosocial Rehabilitation Journal*, 16, 141-146.

Gureje, O. & Adewunmi, A. (1988) Life events and schizophrenia in Nigerians : A controlled investigation. British Journal of Psychiatry, 153, 367-375.

Heller, K., Swindle, R.W. Jr. & Dusenbury, L. (1986) Component social support processes : Comments and integrations. *Journal of Consulting* and Clinical Psychology, 654, 466-470.

Hogarty, G.E., Anderson, G.M. & Reiss, D.J. (1986) Family psychoeducation, social skills training and maintenance chemotherapy in the aftercare of schizophrenia. Archives of General Psychiatry, 43, 633-641.

Holmes, T.H. & Rahe, R.H. (1967) The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

Kapadia, K.M. (1972) Marriage and family in India. Edn. 3, Delhi : Oxford University Press.

Leff, J., Wig, N.N., Ghosh, A., Bedi, H., Menon, D.K., Kuipers, L., Korten, A., Ernberg, G., Day, R., Sartorius, N. & Jablensky, A. (1987) Expressed emotion and schizophrenia in North India III. Influence of relatives expressed emotion in the course of schizophrenia in Chandigarh. British Journal of Psychiatry, 151, 166-173. Murthy, R.S. & Kumar, K. (1997) Marriage and schizophrenia. *Indian Journal of Psychiatry*, 39, 265-266.

Nehra, R. & Kulhara, P. (1987) Development of a scale for assessment of social support: Initial tryout in an Indian setting. *Indian Journal of Social Psychiatry*, 3, 353-359.

Norman, R.M.G. & Malla, A.K. (1993a) Stressful life events and schizophrenia I: A review of the research. *British Journal of Psychiatry*, 162, 161-166.

Norman, R.M.G. & Malla, A.K. (1993b) Stressful life events and schizophrenia II : Conceptual and methodological issues. British Journal of Psychiatry, 162, 166-174.

Paykel, E.S., Mayers, J.K., Dienelt, M.N., Klerman, G.L., Lindenttal, J.J. & Pepper, M.P. (1969) Life events and depression. A controlled study. Archives of General Psychiatry, 21, 753-760.

Singh, G., Kaur, D. & Kaur, H. (1984) Presumptive Stressful Life Events Scale (PSLES) - A new stressful life events scale for use in India. *Indian Journal of Psychiatry*, 26, 107-114.

Thara, R. & Srinivasan, T.N. (1997) Marriage and gender in schizophrenia. *Indian Journal* of *Psychiatry*, 39, 64-69.

Wig, N.N., Menon, D.K., Bedi, H., Ghosh, A., Kuipers, L., Leff, J., Korten, A., Day, R., Sartorius, N., Ernberg, G. & Jablensky, A. (1987) Expressed emotions and schizophrenia in North India II. Distribution of expressed emotion components among relatives of schizophrenic patients in Aarhus and Chandigarh. British Journal of Psychiatry, 151, 160-165.

WHO (1992) The ICD-10 : Classification of mental and behavioural disorders. Geneva : World Health Organization.

PARMANAND KULHARA\*, M.D., F.R.C. Psych., F.A.M.S., Additional Professor and Head, AJIT AVASTHI, M.D., Additional Professor, NITIN GUPTA, M.D., Senior Resident, MRIGENDRA K. DAS, M.D., Ex-Senior Resident, RITU NEHRA, Ph.D., Clinical Psychologist, A. SHEKHAR RAO, Ph.D., Ex-Research Fellow, GAGANDEEP SINGH, M.B.B.S., Junior Resident, Postgraduate Institute of Medical Education and Research, Chandigarh 160012.

#### \*Correspondence