



## Does Expressed Emotion of Family Members of Persons with Schizophrenia prejudiced by their Attitude towards Mental Illness?

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### ABSTRACT

**Background:** Expressed emotion is one of the factor related to relapse in schizophrenia as well as poor prognosis. Opinions are verbal expressions of attitudes in concrete situations. Opinion is backed by knowledge without knowledge we can't give opinion. Knowledge is something about knowing a fact of a particular thing. Some caregivers are able to carry out care giving tasks better than others because of their knowledge about the disease, their experience, level of involvement and skills. So, the present study made an attempt to find out whether expressed emotion by the family members' prejudiced opinion towards mental illness. **Materials and Method:** The present study was a cross-sectional hospital based study conducted at a outpatient department of a tertiary care teaching institute. Sixty family members of persons with schizophrenia were purposively. Attitude questionnaire and opinion about mental illness scale was administered to assess expressed emotion and opinion. **Results:** A significant negative correlation was found between opinion and expressed emotion, indicating higher the expressed emotion higher will be the negative opinion/attitude. **Conclusion:** Results indicated that outcome of schizophrenia could be better by imparting knowledge about illness.

*Keywords: Attitude, opinion, mental illness, expressed emotion, schizophrenia*

### INTRODUCTION

Schizophrenia is a devastating illness, often resulting in a loss of social functioning in affected individuals. Having a relation with schizophrenia affects the roles and interaction with in the family. Characteristic features of schizophrenia are hallucination, delusion and formal thought disorder etc. These positive symptoms may be accompanied by negative symptoms such as affective flattening, social withdrawal, avolition and poverty of thought and speech content. Negative symptoms do not respond as well as positive ones to therapeutic intervention and confer a poorer prognosis. The functional decline associated with the negative symptoms leads to social and economic difficulties and puts burden on the family.

Patterns of familial interactions and attitude of key relatives have an important impact on the outcome of mental illness (Raj et al., 1991). In recent years the interest in the family as a subject of intensive investigation has increased, exploring both

the impact of the family on the course of the schizophrenic illness and as well as the impact on the family living with and caring for a chronically mentally ill member.

Over the years an impressive body of research has been generated in attempts to explain the relationship of expressed emotion (EE) and course of illness, particularly in regard to schizophrenia. Expressed emotion (EE) is a measure of a relative's attitude toward a person with a mental disorder reflected by comments made to an interviewer (Brown et al. 1972). The concept of expressed emotion first emerged during the late 1950s. Medical Research Council Social Psychiatry Unit had seen that patients who left the hospital to live with parents or spouses had worse outcome than those living on their own (Brown, Curstairs and Topping, 1958). So they concluded that there might be certain intense relationships that adversely influence the risk of relapse. Frequency and quality of negative emotions, eg., anger / hostility, expressed by family members or significant others that often lead to a high relapse rate, especially in Schizophrenic patients. High expressed emotion (EE) is a family pathology which has been explained by Vaughn & Leff 1976 in their study on Schizophrenia. Hostility, over involvement, critical comments are the components of expressed emotion. Expressed emotion represents a unique form of psychosocial stress to which persons with schizophrenia are extremely vulnerable, but more precise explanations have thus far been elusive (Hooley & Hiller, 1998). Wuerker (1996) found

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that interpersonal control patterns in high expressed emotion families of persons with schizophrenia showed more conflict than patterns in families with low expressed emotion relatives and that both patients and relatives in high expressed emotion dyads were more likely to respond symmetrically to an attempt at control. In low expressed emotion families, higher levels of warmth predicted a better outcome (Bentson et al. 1998).

Attitude is a dispositional readiness to respond to certain situations, persons or objects in a consistent manner which has been learned and has become one's typical mode of response (Freeman, 1971). The role of attitude and behaviour of key relatives has been examined on outcome of schizophrenia and results have revealed that outcome of illness is closely related to expressed emotion (Vaughn & Leff, 1976). Attitude have several components – some a function of enduring personality traits and others a function of the dimensions of access. Increased knowledge may lower the affective component, even if the cognitive component remains unaffected. The knowledge, affect and behavioural components of attitudes need to be assessed and dealt with separately. Attitude may be either positive or negative. As far as attitude toward mental illness is concerned various studies suggest that there is negative attitude regarding mentally ill and mental illness.

A family is defined as a group of intimates who generate a sense of home and identity complete with strong ties of loyalty and emotion and an experience of a history from a future (Wamboldt & Reiss, 1989). "The nuclear family is a universal human social grouping either as the sole prevailing from the family or as the basic unit from which more complex familial forms are compounded, it exists as a distinct and strongly functional group in every known society" (Murdock, 1949). In the nuclear family, the husband usually plays a dominant role in the household. The absence of parents grant parents uncles, aunts and near relatives places a greater burden on the nuclear family in terms of responsibilities for child rearing (Park, 2000). The joint or extended family is a kind of family grouping which is common in India, Africa, the Far East and the Middle East. The joint family consists of a number of married couples and their children who live together in the same household. There is a common family purse to which all the family income goes and from which all the expenditures are met. The familial relations enjoy primacy over marital relations.

Family holds a very significant role in the multidimensional care system for the persons with mental illness. But often it is seen that due to mental illness persons with mental illness some how tend to get detached from their family members. The family's attempt to understand the meaning of the behaviour of their relative with mental illness is thought to follow a predictable course that shows uncertainty, certainty, denials and acceptance. The largest number of studies conducted in this area showed that there is misinformation, fear and anxiety about the mentally ill. The response to mental illness is sequence of denial, isolation and rejection (Cumming & Cumming, 1965). Studies also showed that interaction pattern depends on the nature of the family system. Lennard et al. (1965) compared interaction pattern in a group of families with a child diagnosed

as "schizophrenic" with interaction patterns in a group of "control" families. The results show that in the schizophrenic families a pattern of consistently lower frequency of father-son, mother-father, son-father and father-mother communication. Beside this the prediction of relapse in schizophrenia is an important research and clinical goal. The study of expressed emotions had an important effect on research into relapse in schizophrenia.

Expressed emotion is one of the factors related to relapse in schizophrenia as well as poor prognosis. Leff (1992) reported that, In IPSS study it was found that the prognosis of schizophrenia in developing countries is better than developed countries. One hypothesis for this is the family structure in developing countries. That is joint family set up is better as far as expressed emotion and its effect is concerned. But this issue has not been examined adequately in scientific research. So this study is an attempt to find out whether expressed emotion is different in nuclear and joint families and whether it has any relationship with the attitude of the relative towards mental illness. The present study not only focuses on attitude and expressed emotion of key relatives of schizophrenics in families but also focuses on how the interaction between the two creates the effect as a whole.

#### *Objective of the study*

This study was conducted with the following aims and objectives:

To study the attitude towards mental illness of family members of persons with schizophrenia.

To study the expressed emotion expressed towards persons with schizophrenia by their family members.

To study the relationship between attitude towards mental illness and expressed emotion of family members of persons with schizophrenia.

#### **MATERIALS AND METHOD**

The present study was a cross-sectional hospital based study conducted at a outpatient department of a tertiary care teaching institute. Sixty family members of persons with schizophrenia (diagnosed as per the ICD-10 (WHO, 1992) criteria without any co-morbid psychiatric disorders and without any chronic physical illness; between 18 to 50 years of age with either sex,) were selected using purposive sampling method; with either sex between 18 to 65 years who had given consent and able to comprehend the instructions were included in the study. Family members with chronic physical/mental illness, substance dependence and scoring more than 1 on General Health Questionnaire - 5 (GHQ-5) (Shamsundar et al, 1986) were excluded. Relevant demographic and clinical data was then obtained. Opinion about mental illness (Cohen and Struening, 1962) and Attitude Questionnaire (Sethi et al. 1985) were then administered with key relatives. Frequency table, parametric tests mean, standard deviation, and correlation was computed with the help of Statistical Package for Social Science (SPSS) Version 16.

## RESULTS

**Table 1: Socio-demographic characteristics of care givers**

Variables		Mean ± SD n (%)
Age in years		40.58±6.35
Sex	Male	37(61.7)
	Female	23(38.3)
Relation	Spouse	19(31.7)
	Sibling	21(35.0)
	Offspring	11(18.3)
	Parent	9(15.0)
Education	Illiterate	12(20.0)
	Up to Matric	24(40.0)
	Higher education	24(40.0)
Occupation	Student	4(6.7)
	Working	48(80.0)
	Nonworking	8(13.3)
Marital status	Single	31(51.7)
	Married	29(48.3)
Religion	Hindu	41(68.3)
	Muslim	13(21.7)
	Other	6(10.0)
Family Income in Rs.	Up to 5000	15(25.0)
	5000-10000	29(48.3)
	Above 10000	16(26.7)
No. of family member		6 ± 2.19
Duration of contact		28.47 ± 1.27

**Table 2: Socio-demographic characteristics of patients**

Variables		Mean ± SD n (%)
Age in years		41.23±9.83
Sex	Male	35(58.3)
	Female	25(41.7)
Residence	Rural	21(35.0)
	Semi-urban	20(33.3)
	Urban	19(31.7)
Education	Illiterate	23(38.3)
	Up to Matric	29(48.3)
	Higher education	8(13.3)
Marital status	Single	26(43.3)
	Married	34(56.7)
Past hospitalization	Yes	28(46.7)
	No	32(53.3)
Occupation	Student	3(5.0)
	Working	22(36.7)
	Nonworking	35(58.3)
Family history	Yes	37(61.7)
	No	23(38.3)
Duration of illness in years		16.7±85.83

**Table 3: Expressed emotion**

Variables	Mean ± SD
Critical Comment	-1.67 ± 3.47
Hostility	-4.25 ± 4.38
Dissatisfaction	.27 ± 4.69
Warmth	2.87 ± 2.66
Over involvement	9.12 ± 3.65
Total Score	12.78 ± 4.95

**Table 4: Attitude (OMI)**

Variables	Mean ± SD
Authoritarianism	19.35 ± 6.88
Benevolence	23.88 ± 8.49
Mental Hygiene	15.15 ± 5.99
Social Restrictiveness	13.07 ± 2.37
Interpersonal Etiology	12.78 ± 4.95
Total Score	84.90 ± 2.39

**Table 5: Correlation between OMI & EE**

Variables	Attitude	p
Expressed emotion	-.741	.01**

## DISCUSSION

**Expressed emotion**

A number of studies showed that amount of expressed emotion is greater in schizophrenic families (Reicher et al. 2003; Marom et al. 2002; King & Dixon, 1996) and due to which the prognosis of illness become worse. Indian studies also showed that critical comments, hostility, dissatisfaction, warmth, emotional involvement affected schizophrenic patients adversely and were responsible for more frequent relapse (Sethi et al. 1985, Trivedi et al. 1983).

It is also seen from the studies that in nuclear families, family members, mothers, fathers, and children influence each other, both directly and indirectly (Minuchin, 2002). In the nuclear family the husband usually plays a dominant role in the household and the absence of parents, grandparents, uncles aunts and near relatives places a greater burden on the nuclear family in terms of responsibilities in child rearing (Park, 2000). It is also evident from the different theories that communication of contradictory message from one parent side (Betason et al. 1956) and abnormal involvement between parents and one parent's abnormal closeness to a child of the opposite sex (Lidz & Lidz, 1949) are the significant family factor which are a contributory factor for schizophrenia.

### Attitude on opinion about mental illness

Assessment of the opinion toward mental illness showed that families have more negative attitude in the area of, authoritarianism, Benevolence, Mental hygiene and interpersonal etiology. Brockington et al. (1993) suggested from their study that benevolence and authoritarianism was significantly higher in case of mental illness. In other studies also (Kshama & Channabasavanna, 1974; Wolff et al. 1996) it was shown that social restrictiveness, authoritarianism, benevolence was strong towards people with mental illness. Negative attitude, found more in nuclear families than joint families could be because of the reason that schizophrenia is more associated with continuous illness and sometime have a deteriorating course with a more dysfunctional support system. Nuclear families having less support within their families, tend to experience more burden of care, reflecting more negative attitude. Bhatti et al. (1988) already have noted in their study that Indian families often tolerates considerable burden without complaint. However, due to rapid industrialization and urbanization and subsequent changes in the family structure and role care of psychiatric patients, impose a significant burden on the families in developing countries like India (Mishra, 2002).

### Correlation between attitude and expressed emotion

Significant negative correlation was found between attitude and expressed emotion, indicating higher the expressed emotion higher will be the negative attitude. Expressed emotion is the measure of a relatives attitude toward a person with a mental disorder reflected by comments made to an interviewer (Brown et al. 1972) and attitude is a dispositional reactions to respond to certain manner which has been learned and has become one's typical mode of response. Freeman's (1971) study also showed that the role of attitude and behaviour of key relatives influences the outcome of schizophrenia and results have revealed that outcome of illness is closely related to expressed emotion and attitude of key relatives (Vaughn & Leff, 1976).

### Limitations of the study:

- Sample size was small as each.
- Subjects were not selected randomly.

### CONCLUSION

A significant negative correlation was found between opinion and expressed emotion, indicating higher the expressed emotion higher will be the negative opinion/attitude. Results indicated that outcome of schizophrenia could be better by imparting knowledge about illness.

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### REFERENCES

- Abrecht, G., Walker, V. & Levy, J. (1982). Social distance from the stigmatized: a test of two theories. *Social Science & Medicine* 16, 1319-1327.
- Arthur, D. (2002). The validity and reliability of the measurement of the concept 'expressed emotion' in the family members and nurses of Hon Kong patients with schizophrenia. *Journal of Psychosocial Nursing and Mental Health Services* 11 (3), 192-8.
- Barrowclough, C., Tarrrier, N., Humphreys, L., Ward, J., Gregg, L.K., Andrews, B. (2003). Self-esteem in schizophrenia: relationship between self-evaluation, family attitudes, and symptomatology. *Journal of Abnormal Psychology* 112 (1), 92-9.
- Beck, J. (2003). Stigmatization of people with mental illness. *British Journal of Psychiatry* 177, 4-7.
- Bentson, H., Lingjarede, O., Notland, T.H., Boye, B., Munkuld, O.G., Bjorjige, H., Uren, G., Askarsson, K.H., Berglarsen, R. (1998). Criticism and hostility in relatives of patients with schizophrenic or related psychosis: demographic and clinical predictors. *Acta Psychiatrica Scandinavica* 97, 76-85.
- Bhatti, R.S., Ali, R.M. & Malhotra, B. (1988). Social support system and family burden due to chronic schizophrenia in rural and urban background. *Indian Journal of Psychiatry* 30, 349-353.
- Birchwood, M.J. & Smith, J. (1983). Family coping behaviour and the course of schizophrenia: A two year follow up study, Ph.D. Thesis, Birmingham University of Birmingham. U.K. In: N, Ahuja J.N. Vyas (Eds), *Textbook of Post Graduate Psychiatry*. Jaypee Brothers, New Delhi.
- Bord, W.K. (1971). The consequences of labeling of a person with mental illness. *Social Psychiatry* 6, 29-33.
- Bowen, M. (1965). Family psychotherapy with schizophrenia in the hospital and in private practice. In: Boszormenyi-Nagy I, Framo J (Eds): *Intensive Family Therapy*. New York, Harper & Row 216-225.
- Bowen, M. (1967). Family psychotherapy. *American Journal of Psychiatry* 31, 40-60.
- Brockington, F.I., Hall, P., Levings, J. & Christopher, M. (1993). The community's tolerance of the mentally ill. *British Journal of Psychiatry* 162, 613-625.
- Brown, G.W. & Rutter, M. (1966). The measurement of family activities and relationships: A methodological study. *American Journal of Psychiatry* 91, 241-263.
- Brown, G.W., Birley, J.L.T., & Wing, J.K. (1972). Influence of family life on the course of schizophrenic disorders. *British Journal of Psychiatry* 121, 241-258.
- Brown, G.W., Carstairs, G.M., Topping, G. (1958). The post hospital adjustment of chronic mental patients. *Lancet* 11, 65-689.
- Byalon, K., Jed, J. & Lehmann, S. (1982). Family intervention with treatment-Refractory Chronic Schizophrenics. Presented at the 70<sup>th</sup> International Congress of Applied Psychology, Edinburgh, Scotland.
- Chou, K.L., Mak, K.Y., Chung, P.K. & Ho, K. (1996). Attitude towards mental patients in Hong Kong. *International Journal of Social Psychiatry* 42, 215-224.
- Chung, P.K., Mak, K.Y. & Chan, D. (1994). Mental Health Attitude Questionnaire. *International Journal of Social Psychiatry* 40, 200-218.
- Cohen, J., Struening, E.L. (1962). Opinion about mental illness in the personal of two large mental health hospitals. *Journal of Abnormal and Social Psychology* 64, 349-360.

- Crocetti, G., Spiro, H. & Siassi, I. (1974). *Contemporary Attitude Toward Mental Illness*. Pittsburgh: University of Pittsburgh Press.
- Cumming, E. & Cumming, J. (1957). *An Experiment in mental Health*. Cambridge: Harvard University Press.
- Cumming, E. & Cumming, J. (1965). Stigma and mental illness. *Community Mental Health Journal* 1, 135-143.
- Docherty, N.M. (1995). Linguistic preference performance in parents of schizophrenic patients. *Psychiatry* 58, 20-27.
- El-Islam, M.F. & Abu-Dagga, S.I. (1992). Lay explanations of symptoms of mental ill health in Kuwait. *International Journal of Social Psychiatry* 38, 150-156.
- Faloon, I.R.H., Boyd, J.I. & McGill, C.W. (1984). *Family Care of Schizophrenia*. New York: Guilford Press.
- Freeman, H. (1971). Attitude towards mental illness among relative of normal mental patients. *American Social Review* 26, 59-66.
- Furnham, A. & Rees, J. (1998). Lay theories of schizophrenia. *International Journal of Social Psychiatry* 34, 212-220.
- Gaebel, W., Baumann, A.E. (2003). Interventions to reduce the stigma association with severe mental illness: Experiences from the open the doors program in Germany. *Canadian Journal of Psychiatry* 48, 657-662.
- Hall, P., Brockington, I., Levings, J. et al. (1993). A comparison of responses to the mentally ill in two communities. *British Journal of Psychiatry* 162, 99-108.
- Hooley, A., Hiller, G. (1998). Stigma of mental illness: Foreward. *Lancet* 351, 1047-1060.
- Kadri, N., Manoudi, M., Berrada, S., Moussaoui, M.D. (2004). Stigma's impact on Moroccan families of patients with schizophrenia. *Canadian Journal of Psychiatry* 49, 625-629.
- Kamal, P. and Gautam, S. (1992). Family environment of psychiatric patients. A study of North Indian Sample. *Indian Journal of Psychiatry* 34, 231-235.
- Kapur, R.L. (1992). The family and schizophrenia priority areas for intervention research in India. *Indian Journal of Psychiatry* 34, 3-7.
- King, S. & Dixon, M.J. (1999). Expressed emotion and relapse in young schizophrenia outpatients. *Schizophrenia Bulletin* 25 (2), 377-386.
- King, S., and Dixon, M.J. (1996). Expressed emotion, family dynamics, and symptom severity in a predictive model of social adjustment for schizophrenic young adults. *Schizophrenia Research* 14, 121-132.
- Kiran, M. (2001). Family role in psychiatry. *Indian Psychiatric Society-Jharkhand State branch, Newsletter, Sept-Nov*, p. 5.
- Kshama, R. & Channabasavanna, S.M. (1974). A study of attitudes of relatives of mental patients undergoing hospitalization. *Indian Journal of Psychiatric Social Work* 3, 21-24.
- Leff, J.P., Sartorius, N., Jablensky, A. et al. (1992). The international pilot study of schizophrenia: five year follow up findings. *Psychological Medicine* 22, 131-145.
- Lennard, B., Hentry, L., Beaulieu, D., Maurice, R., Embrey, C., Nolen, G. (1965). Interaction in families with a schizophrenic child. *Archives of General Psychiatry* 12, 166-183.
- Lidz, R.W. & Lidz, T. (1949). The family environment of schizophrenic patients. *American Journal of Psychiatry* 106, 332-345.
- Link, B.G. (1990). The labeling theory of mental disorder: A review of the evidence. In: J.R. Greenley (Ed.), *Research in community and mental health: Mental disorder in social context*. Greenwich: Mcmillan Publishing Co. 85-105.
- Magana, A.B., Goldstein, M.J., Karno, M., Miklowitz, D.J., Jenkins, J. & Faloon, I.R.H. (1986). A brief method for assessing expressed emotion in relatives of psychiatric patients. *Psychiatric Research* 17, 203-212.
- Malhotra, H.K., Inam, A.S. & Chopra, H.D. (1981). Do the psychiatric patients reject themselves? *Indian Journal of Psychiatry* 23 (1), 44-48.
- Mark, J. (1953). Attitude of mother to their schizophrenic children. *Indian Journal of Psychiatric Social Work* 1, 29-31.
- Marom, S., Munitz, H., Jones, P.B., Weizman, A., Hermesh, H. (2002). Familial expressed emotion: outcome and course of Israeli patients with schizophrenia. *Schizophrenia Bulletin* 28 (4), 731-43.
- Miklowitz, D.J., Goldstein, M.J., Doane, J., Nuechterlein, K.H., Strachan, A.M., Snuder, K.S. & Magana, A. (1989). Is expressed emotion an index of transactional process? *Family Process* 28, 153-167.
- Miller, F., Dworkin, J., Ward, M. & Barone, D. (1990). A preliminary study of unresolved grief in families of seriously mentally ill patients. *Hospital and Community Psychiatry* 41, 1321-1325.
- Mino, Y., Inoue, S., Shimodera, S., Tanaka, S., Tsuda, T., and Yamamoto, E. (1998). Expressed emotion of families and negative/depressive symptoms in schizophrenia: A cohort study in Japan. *Schizophrenia Research* 34, 159-168.
- Minuchin, S. (2002). *Families and family therapy*. Cambridge: Harvard University Press.
- Mishra, Sujit (2002). Perceived family burden of affective disorder (First Episode Mania) among adolescents and adults. M. Phil (PSW) dissertation, submitted to the Ranchi University, under the guidance of Dr. C.R.J. Khes, Associate Prof. of Psychiatry, C.I.P., Ranchi.
- Murdock, J. & Sainbury, P. (1949). Mental illness in family. *Lancet* 1, 544-557.
- Ojanen, M. (1992). Attitude toward mental patients. *The International Journal of Social Psychiatry* 38, 120-130.
- Oyefeso, A. (1994). Attitudes toward the work behaviour of ex-mental patients in Nigeria. *International Journal of Social Psychiatry* 40, 27-34.
- Park, K. (2000). *Park's textbook of preventive and social medicine*. Jabalpur: Banarsidas Bhanot publishers.
- Prabhu, G., Raghuram, A., Verma, N. & Annette, C. (1984). Public Attitude toward mental illness: A review. *NIMHANS Journal* 2 (1), 1-14.
- Raj, B., Farina, A., Holland, C. & Ring, K. (1991). Role of stigma and interpersonal reaction. *Journal of Abnormal Psychology* 71, 421-429.

- Reicher, B., Adeyami, J.D., Lawal, R.A., Famuyiwa, O.O., Haruna, A.Y., Jibod, M.O. (2003). Emotional reactions of relatives to schizophrenic patients in Lagos, Nigeria. *British Journal of Psychiatry* 32 (1), 7-11.
- Saheed, W. & Gerry, K. (1997). A comparison of public attitudes in Britain and Saudi Arabia towards auditory hallucinations. *International Journal of Social Psychiatry* 43 (1), 175-183.
- San, D.J., Flora, B. & Saxena, J. (1998). Recent developments in expressed emotion in schizophrenia. *British Journal of Psychiatry* 160, 601-620.
- Scazufca, M. & Kuipers, E. (1996). Links between expressed emotion and burden of care in relatives of patients with schizophrenia. *British Journal of Psychiatry* 68, 580-587.
- Sethi, B.B. (1989). Family as a potent therapeutic force. *Indian Journal of Psychiatry* 31, 22-30.
- Sethi, B.B., Chaturvedi, P.K., Trivedi, J.K., Saxena, N.K. (1985). Attitude of family and outcome in schizophrenia. *Indian Journal of Social Psychiatry* 1, 186-193.
- Shamsunder, C., Sriram, T.G., Muraliraj, S.G. & Shanmugham, V. (1986). Validity of a short 5 items version of the General Health Questionnaire. *Indian Journal of Psychiatry* 28, 217-219.
- Steadman, H. & Cocozza, J. (1978). Selective reporting and the public's misconception about the criminally insane. *Public Opinion Quarterly* 42, 523-533.
- Trivedi, J.K., Chaturvedi, P.K., Sethi, B.B., Saxena, N.K. (1983). A study of attitudes of key relatives of schizophrenic patients. *Indian Journal of Psychiatry* 25, 264-268.
- Vaughn, C.E. & Leff, J.P. (1976). The influence of family and social factors on the course of psychiatric illness. *British Journal of Psychiatry* 129, 125-137.
- Wadia, A.B. (1967). Family in health and disease. *Journal of Family Welfare* 14 (9), 9-15.
- Wamboldt, G. & Reiss, B. (1989). Mental illness and family 2, 565-584.
- Weisman, A., Lopez, S.R., Karno, M., Jenkins, J. (1993). An attributional analysis of expressed emotion in Mexican-American families with schizophrenia. *Journal of Abnormal Psychology* 102 (4), 601-6.
- Wolff, G., Pathare, S., Craig (1996). Community attitude toward mental illness. *British Journal of Psychiatry* 168, 183-190.
- Wolman, B.B. (1960). Contemporary theories and systems in psychology. New York: Harper and Row.
- World Health Organization (1992). The ICD-10 classification of mental and behavioural disorder. Clinical Descriptions and diagnostic guidelines. Geneva.
- Wuerker, A.M. (1996). Communication patterns and expressed emotion in families of persons with mental disorders. *British Journal of Psychiatry* 22 (4), 33-35.
- Wynne, L. & Singer, M.T. (1965). Thought disorders and family relation of schizophrenia. *Archives of General Psychiatry* 9, 191-206.
- Yang, H. (1989). Attitudes towards psychosis and psychotic patients in Beijing. *International Journal of Social Psychiatry* 35, 181-187.