FAMILY EDUCATION AND SOCIAL ADJUSTMENT OF PSYCHIATRIC CLIENTS

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SUMMARY : Efficacy of psycho-educational programme in promotion of social and family functioning among Iranian psychiatric clients is the theme of this study. One hundred and seventy schizophrenics with 174 clients with mood disorders were included in the present study and adopting Solomon's experimental design they were assigned into four groups: 2 experimental and 2 control groups for each illness category. Key family members from experimental groups participated in a weekly educational programme for a duration of six months. Batteries of tests were used to ascertain family's skills in management of client's verbal and non verbal behaviours. Baseline data with those after intervention, i.e., 6 and 18 months were compared, using SPSS programme and running statistical tests such as t-test and ANOVA. Comparing the experimental and control groups, more attitudinal, cognitive and behavioural changes among families followed by more desirable role performance ability by the clients in experimental groups were observed. Results indicated that family education can bring about desirable changes in the family dynamics and better outcome of psychiatric disorders. Psychiatric social workers can use psycho-educational programme in imparting necessary skills for effective management of verbal and non verbal behaviours of psychiatric patients in the family.

Key Words: Psycho-educational programe; schizophrenia; mood disorder; verbal and non-verbal behaviours.

INTRODUCTION

Psychiatric illness is viewed as one of the disabling afflictions which can affect various aspects of individual's social functioning. Undesirable behaviours on the part of clients such as dependency, isolation, lack of sense of responsibility, and indifference are significant (1). With limited available psychiatric resources in the community, families have to bear the burden of patient at home which often results in social isolation from mainstream of the society and disruption of their social network (2). Presence of psychiatric client at home imposes several limitations on the family such as social burden, financial strain and psychological stress (3-4). In this process dynamics of these families get affected, making the family environment less tolerant to a psychiatric client (5). To this end several studies have focussed on the family's response to the inevitable trauma of living with a mentally ill member, resulting in several promising research and clinical approaches (6-11). A series of highly structured, supportive and psycho-educational models aiming at deintensifying the family environment have been developed (12).

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In their pioneering work, Vaughn and Leff developed the concept of expressed emotion (EE) and established a significant association between the expressed emotions of relatives and relapse rates of psychiatric clients (13). A Two year follow up of clients by Leff and Vaughn showed that clients coming from families with high EE had significantly greater relapse rates than those from low EE families (15). Clients from excessively critical or emotionally over involved families were much more likely to relapse than their counterparts from more tolerant families (16). Family characteristics such as lack of cohesion, social interaction and critical attitudes predicted earlier readmission in the psychiatric ward (5). Also, criticism and over involvement on the part of the family turned out as the best single predictor of symptomatic relapse in the 9 months after discharge from hospital (17). Outcome of schizophrenia appeared to be subject to level of family's 'cohesion', 'conflict', and 'idealization' (5). Meanwhile some researchers have emphasized the protective role of regular medication in reducing the chances of relapse attributed to stressful life events and high EE in the family (18). This study is an endeavour to improve adjustment ability of clients by means of attitudinal, behavioural and cognitive changes in their families. Attempt was made to see the differences, if any, in the level of family functioning, families' attitudes towards psychiatric clients, families' skills in management of clients' verbal and non verbal behaviours at home, and overall clients' social adjustment as a result of intervention.

MATERIALS AND METHODS

Research design

In order to achieve the above objectives and minimize the effect of intervening variables, in this study Solomon's experimental design was adopted. This research strategy allowed us to divide the subjects (i.e., schizophrenia and mood disorders) into four groups, i.e., two controls and two experimentals. Pre and post tests for various features including family environment, attitude towards mentally ill, skills in management of psychiatric client, and client's social adjustment were conducted for one set of control and experimental groups from each illness category, while post test for the aforementioned features was done for the remaining two sets of control and experimental groups (32).

Subjects

This study was carried out on a sample selected from the psychiatric clients (male and female) discharged from Noor and Farabi Medical Centres, Esfahan, Islamic Republic of Iran between September and November 1998 and were followed for the duration of one year, i.e. January 1999 to March 2000. The sample subjects comprised 170 clients with the diagnosis of schizophrenia and 174 with mood disorders. The experimental group for schizophrenics contained 45 and 42 members while the controls for the same comprised 43 and 40 members respectively. In case of those with mood disorders, the experimental groups contained 44 and 43 members while their controls comprised 44 and 43 members respectively. All subjects were randomly selected and assigned into their respective groups, using DSM-IV criteria while the sample size for each sub-category was determined by the following formula:

$$N=(N1-\alpha/2+Z1-\beta)^{22}(S1^{2}+S2^{22})/(m1+m2)^{22}$$

Subjects were matched according type of disorder, relapse rate, frequency of admission, age, sex, nature and dosage of medication. All clients received psychiatric treatment under two senior psychiatrists at Isfahan Community Mental Health Centre who visited them thrice in a week on an O.P.D. basis. Regarding their families, special care was taken to induct the clients' primary care takers who showed willingness to participate in this study and evidently did not suffer from any psychiatric disorder nor had any history of this problem. As another selection criteria, they had to be living with the family while playing a major role in decision making and providing necessary support for the client. Ensuring their eligibility, the key family members from experimental groups participated in the psycho-educational programme.

Table 1 : Changes in select characteristics of schitophrenic groups at different intervention phases.

Study groups	Phases	FFS	FAMI	CMS	CSA
E1	I, II	**	**	**	**
	I, III	**	**	**	**
	II, III	**	**	**	**
C1	I, II	**	**	*	**
	I, III	NS	NS	**	**
	II, III	NS	NS	NS	**
E2	I, II	-	-	-	-
	I, III	-	-	-	-
	II, III	**	**	**	**
C2	I, II	-	-	-	-
	I, III	-	-	-	-
	II, III	**	**	**	**

NS: Not significant, ** : P<0.001, * : P < 0.05
FFS: Family Functioning, FAMI: Family's Attitude Towards Mentally Ill, CMS: Client's Management S, CSA: Client's Social Adjustment, E1: Experimental with Pretest, E2: Experimental without Pretest, C1: Control with Pretest, C2: Control without Pretest.

Research instruments and data collection method

For the purpose of this study primary as well as secondary data were used. Subjects' demographic data were obtained by means of an interview schedule. An interview guide was used to collect secondary data pertaining to psychiatric history of the clients from hospital records. At different phases of intervention batteries of indices and scale were used to determine the dependent variables including family functioning, family's attitude towards mentally ill, family's style in management of client's verbal and non-verbal behaviours, and client's social adjustment. All instruments were administered on the key family members. In addition, the researchers during their home visits made special observations about family interactions with each other and with identified client. Field visits also helped in cross checking the data pertaining to family environment and patient's social adjustment. Research instruments used are discussed below in detail. The data were collected by two trained social workers who were unaware of the objectives of this study.

Family functioning scale (FFS)

Bloom's family functioning scale was used to determine the subjects' family atmosphere. This instrument contains 75 items which measures 15 aspects of family: cohesion, expressiveness, conflict, intellectual-cultural orientation, active recreational orientation, religious emphasis, organization, family sociability, external locus of control, family idealization, disengagement, democratic family style, laissez faire family style, authoritarian family style, and enmeshment (33). FFS has been used in some other studies (5). Subject's responses to each item were rated on the basis of Likert's 5-point scale: 0= totally disagree, 1 =disagree, 2=indifferent or no response, 3=agree, and 4=strongly agree. In this manner the score for each item ranged from 0 to 4 while for overall 75 items a respondent's score could range between 0 and 300. For some of the 75 items higher score indicated desirable functioning and conversely for some of them lower score indicated desirable functioning. The reliability of FFS was established by test-retest method on a sample of 40 families, who were not included in this study, yielding a Cronobach Alpha value of 0.76.

Family's attitude towards mentally ill (FAM)

FAM is a self developed index which contains 30 items and the respondent could answer each question by saying 'Yes' or 'No', wherein for some items the former answer indicated positive attitude and conversely the latter one indicated negative attitude. In this way each item was scored as 0 or 1 while the overall score for 30 items ranged from 0 to 30. This index was tested for validity, using content method. Its reliability was established by the test-retest method on 30 families, who were not a part of this study, yielding a Cronobach Alpha value of 0.73.

Table 2 : Inter group comparison of selected characteristics among schizophrenic Cl group at three intervention phases.

Phases	Groups	FFS	FAMI	CMS	CSA
Baseline	E1, C1	NS	NS	NS	NS
6 months	E1, C1	NS	NS	NS	NS
	E1, E2	NS	NS	NS	NS
	E1, C2	NS	NS	NS	NS
	C1, C2	NS	NS	NS	NS
	E2, C1	NS	NS	NS	NS
	E2, C2	NS	NS	NS	NS
18 months	E1, C1	NS	*	*	*
	E1, E2	NS	NS	NS	NS
	E1, C2	NS	NS	*	*
	C1, C2	NS	NS	NS	NS
	E2, C1	NS	*	*	*
	E2, C2	NS	NS	*	*

Client's management skills index (CMS)

PMS is a self developed index which contained 49 items, of which 19 items measured family's skills in management of client's verbal behaviours and the remaining 30 items measured family's skills in management of client's non verbal behaviours. The responses to each item could be in two forms, namely, 'Applicable' and 'Not Applicable'. While score of each item ranged from 0 to 1, subject's overall score for items pertaining to verbal behaviours ranged from 0 to 19 and for non verbal behaviours ranged from 0 to 39. Overall scores for this index in case of each respondent ranged from 0 to 49. Higher scores indicated respondent's mastery in better management of the client. PMS index was tested for validity, using content method. Its reliability was established by test-retest method on a sample of 40 families, who were not a part of this study, yielding a Cronobach Alpha value of 0.89. In addition the potential of this instrument has been demonstrated in some other studies (34).

Client's social adjustment scale (SAS)

Client's social functioning is viewed as the major dependent variable in this study. A revised version of Weissman's social adjustment scale (SAS) with 41 items which measures individual's level of functioning at various areas, including work place, house, school, and community was used. Responses to each item are rated on the basis of Likert's 5-point scale, depending on the nature of each question. Scores from each item can be calculated separately and it can be considered as the total score of individual's social adjustment. Scores obtained from each respondent varies with client's status in the society. For instance, as a student the client's score for schooling ranged from 5 to 25. When the same client was unmarried, his or her score for social interactions could range from 13 to 65. Also, with change in social status as a married student, his or her score for marital life could range from 13 to 65. Therefore, a bachelor student's score ranged between 18

and 90 while a married student's total score for same areas could range between 31 and 155. The reliability of SAS was established by test-retest method on 60 psychiatric clients, who were not a part of this study, yielding a Cronobach Alpha value of 0.82.

Analysis design

The data obtained were converted into quantitative form and were computer analyzed, using Statistical Package for Social Sciences (SPSS). Frequency percentages along with measures of central tendency including mean, skewness and standard deviation were calculated by means of descriptive analysis. Analysis of Variance (ANOVA) and t-paired were used to make out the significant differences observed vis-à-vis various dependent variables, if any, between and within each groups at baseline, after one year of intervention and 18 months of follow up.

Family training programme

Adhering to the principles of confidentiality and self determination in social work practice, families' approval was sought to participate in this programme. The training course for families was based on a curriculum which was conducted biweekly over a period of six months. The subject matters presented in this programme provided guidelines for key family members about nature of mental illness, its probable causes, associated symptoms, client's psycho-social needs, self care management, management of client's impulsive, aggressive, stereotyped, and inappropriate behaviour, implications of family environment in relapse rate, and the importance of medication. Teaching methods comprised lectures, group discussions, case illustrations and demonstrations of management skills.

RESULTS

Subject's socio-demographic profile

The clients' ages in this study ranged between 25 and 29 years. Average age for schizophrenics was estimated 27.35 $\pm$ 6.05 years while for those with mood disorders it was 23.92 $\pm$ 4.26 years. The clients lived with their families of origin or procreation. Majority of them were with primary education, unmarried, housewives (for females), whose illness duration was less than a year, had been hospitalized once or twice, and had never attempted suicide.

Family environment score (FES)

I. Schizophrenics

Comparison of family functioning scores in each intervention phase showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest (Table 1). Comparison of family functioning scores between experimental and control groups both with and without pretest did not show any significant differences at three intervention phases (Table 2).

Table 3 : Changes in select characteristics of mood disorder groups at different intervention phases.

Study groups	Phases	FFS	FAMI	CMS	CSA
E1	I, II	**	**	**	**
	I, III	**	**	**	**
	II, III	**	**	**	**
C1	I, II	*	*	*	**
	I, III	*	NS	**	*
	II, III	NS	NS	NS	NS
E2	I, II	-	-	-	-
	I, III	-	-	-	-
	II, III	**	**	**	**
C2	I, II	-	-	-	-
	I, III	-	-	-	-
	II, III	**	**	**	NS

II. Mood disorder clients

Comparison of family functioning scores in each intervention phase showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second phases as well as between first and third phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest (Table 3). Comparison of family functioning scores between experimental and control groups both with and without pretest showed significant differences between E1 and C1, E2 and C1, and E2 and C2 after 18 months of follow up (Table 4).

Family attitude towards mentally ill (FAM)

I. Schizophrenics

Comparison of family's attitude towards mentally ill also showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest

(Table 1). Comparison of family's attitude between experimental and control groups both with and without pretest showed significant differences between E1 and C1, E2 and C1 after 18 months of follow up (Table 2).

II. Mood disorder clients

Comparison of family's attitude towards mentally ill showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest (Table 3). Comparison of familial attitude towards mentally ill between experimental and control groups both with and without pretest showed significant differences between E1 and C2 and E2 and C1(Table 4).

Client's management skills (CMS)

I. Schizophrenics

Comparison of families' scores in management of client's behaviours also showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second as well as second and and third phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest (Table 1). Comparison of client's management scores between experimental and control groups both with and without pretest showed significant differences between E1 and C1, E1 and C2, E2 and C1 and E2 andC2 after 18 months of follow up (Table 2).

II. Mood disorder clients

Comparison of families' scores in management of client's behaviours showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second, first and third phases for the control group with pretest (C1), and between second and third phases for the experimental (E2) and control (C2) groups without pretest (Table 3). Comparison of client's management scores between experimental and control groups showed significant differences between E1 and C1, C1 and C2, E2 and C1, and E2 and C2 after six months of intervention, as well as E1 and C2, C1 and C2, E2 and C1 and E2, C2 and E1 and C1 after 18 months of follow up (Table 4).

Table 4 : Inter group comparison of selected characteristics among mood disorder at three intervention phases.

Phases	Groups	FFS	FAMI	CMS	CSA
Baseline	E1, C1	NS	NS	NS	NS
6 months	E1, C1	NS	**	**	NS
	E1, E2	NS	NS	NS	NS
	E1, C2	NS	**	NS	NS
	C1, C2	NS	NS	*	NS
	E2, C1	NS	*	**	NS
	E2, C2	NS	*	*	NS
18 months	E1, C1	*	NS	*	*
	E1, E2	NS	NS	NS	NS
	E1, C2	NS	*	*	NS
	C1, C2	NS	NS	**	NS
	E2, C1	*	*	**	*
	E2, C2	*	NS	*	*

Client's social adjustment (CSA)

I. Schizophrenics

Comparison of client's adjustment score also showed significant changes for the experimental group with pretest (E1), control groups with pretest (C1), and experimental group without pretest (E2) at each successive phase. However, no significant changes was observed among the control group without pretest (Table 1). Comparison of client's adjustment skills between experimental and control groups both with and without pretest showed significant differences between E1 and C1, E1 and C2, E2 and C1 and E2 andC2 after 18 months of follow up (Table 2).

II. Mood disorder clients

Analysis of data pertaining to client's adjustment skills showed significant changes for the experimental group with pretest (E1) at each successive phase, between first and second, as well as first and third phases for the control group with pretest (C1), and between second and third phases for the experimental without pretest (Table 3). Comparison of client's management scores between experimental and control groups both with and without pretest showed significant differences between E1 and C1, E2 and C2 as well as E2 and C1 after 18 months of follow up (Table 4).

DISCUSSION

This study was an attempt to influence the social adjustment ability of psychiatric clients by means of family education and bringing about attitudinal and behavioural changes in their family members. Analysis of data clearly

indicates that with successive phases of intervention, the family environment of the subjects under study have become more tolerable. These changes are more prominent for mood disorder cleints than schizophrenics (Tables 1 and 3). These differences could partly be attributed to the devastating condition of families with schizophrenics who are supposedly marked by high expressed emotion (EE), disengagement, and poor locus of control (5,35-36). This alerting condition brings more demand, making professionals in general and psychiatric social workers in particular, to be sensitive to families of schizophrenics. Social worker is expected to demonstrate more patience without expecting dramatic changes in family dynamics of psychiatric clients.

With regard to familial attitude towards mentally ill, during the process of time and interaction with professionals, families developed more liking for their clients, accepting them with their disabilities. At the outset and before training, while sharing their inner most feelings, families felt shameful, guilty and far from the main stream of the society. In due course, with emotional and social support received, families felt more accepted and workers attempt was made to gear up the knowledge base of families towards better understanding of the phenomenon of mental illness and acceptance of the mentally ill at home as a needy family member. Findings of this study indicate that with all cultural connotations and influences on one's attitude, training and education can bring about desirable attitudinal changes in individuals towards mentally ill. The principles of acceptance and controlled emotions in social work practice helped the workers to demonstrate their mastery over the cleints and gain their confidence in the process of intervention.

Wichstrom and co-workers (1995) believe that the success of family intervention for psychiatric clients depends on the nature of parental relationships (37). To this end, improvement of family's skills in better management of client's behaviour was considered as one of the main objective of this study. In this process families were exposed to a training programme in which the art of communication with psychiatric client's non verbal and verbal behaviours were practically demonstrated. This training programme aimed at ameliorating the pathological interaction styles which hinder treatment progress. Interestingly, at every successsive stage families gained more confidence in managing their clients at home and becoming less dependent on the health system for the client's rehospitalization. Majority of the clients needed to visit the psychiatric out patient department once a month. Psychiatric social workers used to make need of assessment and by involving their families attend to the clients' top priorities.

These observations strengthen Fowler's view point regarding motivating the role of psycho-educational programme in families' participation in the treatment process of their clients (38). The change brought about in the families' skills could be attributed to the positive effect of educational programme introduced in this study. Findings of this study comprehend the earlier findings of Brooker (24), Birchwood and his co-workers (30), Fowler (37) and Atwood (29) who attributed attitudinal changes among families to family psycho-educational programmes (24, 37-39).

Improvement of client's social adjustment and role performance was the ultimate goal of this study. Analysis of data in this respect showed that with every successive phase of intervention, there were improvement in performance of clients. In the beginning of this study, clients were accompained by their family members and gradually they could manage alone for their monthly visits. Families expressed satisfaction about clients' role performance at home, school, college and community. Brooker (24) believes that critical comments and emotional overinvolvement on part of the family can have severe implications for social adjustment of the clients in the community. In order to facilitate better adjustment of psychotic clients, some scholars have used psychoeducational programmes (10). Anderson and Adams (11) have shown that better treatment of schizophrenia is ensured by family intervention. Mc Nally and Goldberg (9) have demonstrated the potentials of cognitive coping strategies in treatment of schizophrenics who are resistant to drugs. Communication skills training have also been used by Greer *et al.* (25) for treatment of schizophrenics. Findings of this study comprehend earlier findings of other scholars such as Brooker (24), Birchwood and his co-workers (30), Fowler (37), Anderson *et al.* (12), and Atwood (29) who have shown the efficacy of psycho-educational programmes in desirable outcome of psychiatric illness (24,30,37-38).

Conclusively, this experimental study shows a chain process wherein attitudinal, cognitive and behavioural elements conjointly influence the process of psychiatric client's role performance and social adjustment. The triangle of family dynamics, attitude held towrds mentally ill, and skills in management of client's behaviour appear to have a domineering role in client's social adjustment. Observations made in this study can have implications for social policy, delivery of mental health services in the community and health system research. Above all, these findings throw light on the crucial role of social workers in delivery of mental health care services. In the light of present findings it is necessary to make families responsible caretakers by removing their biases and misconceptions about mental illness. Training programmes for families of the mentally ill when supplemented with psychiatric medication can ensure better outcome for psychiatric illness. In view of financial cost of mental illness and lack of resources, mental health planners are expected to design community models of mental health services which encourages people's participation in health delivery system. Community mental health in this respect will play a dual role of removing the social stigma and democratizing the delivery of services. Interestingly previous scholars have reported similar experiences (21,39).

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