

Agrotherapy New Concept of Rehabilitation for Chronic Schizophrenics in Pakistan

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Abstract

The provision of comprehensive programme for mental health in the community setting has achieved an important piece in the field of psychiatric rehabilitation. The concept of agrotherapy which is based on the philosophy of keeping patients occupied in a rural and agricultural setting with more structured activities has been found to be a promising innovation for the rehabilitation of chronic schizophrenics. In this regard, this paper describes the results of a three years follow-up study conducted at Fountain House Farm, Farooqabad to evaluate the effectiveness of agrotherapy. The findings are discussed in terms of practical implications of this innovative approach in the rehabilitation of chronic schizophrenic patients (JPMA 43:251, 1993).

Introduction

Management of schizophrenia has changed considerably during the last few decades¹. Introduction of anti-psychotic drugs reduced the average hospital stay and future relapses in schizophrenics^{2,3}. The major advances are in the area of rehabilitation and re-entry of these patients into the community^{4,5}. As such patients can be maintained on drugs, the mental health care facilities are reorganized with a special emphasis on community involvement and psycho-social rehabilitation⁶. The concepts of "Therapeutic Community" and "Halfway House" to introduce interpersonal influences and environmental factors in the management of these patients are highlighted in these programmes and usefulness of patients is greatly emphasized in terms of productivity^{7,8}. The behavioural approaches are also important in terms of improving adjustment and resettlement of chronic long stay patients in the community^{9,10}. Fountain House Lahore, a collaborative project of Lahore Mental Health Association and Fountain House New York was established in 1971 for psychosocial rehabilitation of schizophrenics^{11,12}. It started as a half way house and later converted to a residential place. Over the years the pre-vocational and vocational programmes, transitional employment facilities and other services of the house showed very promising results in the field of psychiatric rehabilitation¹³. Initial services of Fountain House were designed mainly for patients coming from urban areas but later a special programme was evolved for the rehabilitation of persons coming from rural backgrounds. This was the beginning of agrotherapy (agricultural based rehabilitation programme) at Farooqabad Farm about 55 kms from Lahore. This provided a variety of activities connected with farming, cultivation, gardening and agriculture industry. The experience at Fountain House Lahore showed its effectiveness by various follow-up studies¹⁴⁻¹⁶. but no comparative data was available for agrotherapy. This paper describes three years observations on agrotherapy starting from July, 1988.

Sample and Method

Members between ages of 20-60 years residing in Fountain House Lahore with a diagnosis of schizophrenia as per DSM-III¹⁷ and having 5 years or more history of illness, were screened for this

project. Those with agricultural background or having interest in agrobased activities and willing to go to the Farm were included in the study. Patients suffering from organic disorders or obvious physical handicap were excluded. Twenty-five patients were thus selected and sent to the farm. As the project was conceived to have along term duration, the patients and their relatives were explained about the nature of this programme. Patients were assessed for various jobs to be done at the Farm and assigned to the particular work unit such as fish farm, poultry farm, teddy goat farm, mini zoo, maintenance of honey bee houses, gardening and cultivation of crops and vegetables. Detailed medical, psychological and social assessments of all these patients were carried out. The rehabilitation as well as mental status were monitored using standardized instruments like Brief Psychiatric Rating Scale (BPRS) ¹⁸, Krawieck's Scale (KW) ¹⁹ Morningside Rehabilitation Status Scale (MRSS) ²⁰ and different activity proformas. The scores on these scales were compared using analysis of variance and Spearman correlation coefficient to find the correlation between the rehabilitation status and the severity of illness. All patients received long acting neuroleptic medication in the form of injections on fortnightly or monthly basis. The doses, however, remained uniform with minor adjustments for all the patients.

Results

The results are based on the information collected over a period of three years. Being a longer duration, out of twenty-five, sixteen patients continued with the programme and completed the study period.

Table I. Demographic details.

Number	16		
Sex	All male		
Age	Mean	28.18 years	
	S.D.	±9.11	
Duration of illness	Mean	10.45 years	
	S.D.	±6.99	

Table I shows the demographic data of the sample. The scores of the patients on different scales recorded annually during the study period are shown in Table II.

Table II. Mean score on scales of severity of illness of rehabilitation measuring scales.

	Baseline Score	At 1 year	At 2 year	At 3 year
BPRS	70.00±9.35	55.0±4.6	43.0±5.3	33.18*±8.13
KW	20.81±2.31	12.5±3.5	7.6±2.5	3.37*±3.82
MRSS	22.51±3.01	19.3±1.8	15.0±2.3	11.37 ±2.47

***P<0.01**

A significant decrease in the rating and improvement in mental state and rehabilitation status was

observed during this period. It was evident that patients improved in terms of different variables measuring rehabilitation and psycho-social adjustment. Positive and significant correlations were observed between scores of rehabilitation status and the illness (Table III).

Table III. Correlation of rehabilitation score with severity and of duration of illness (N = 16).

	MRSS score	BPRS score	KW score	Duration of illness
MRRS score	-	0.69*	0.60*	-0.14
BPRS score	0.69*	-	0.40	0.62*
KW score	0.60*	0.40	-	0.59
Duration	-0.14	0.62*	0.59*	-

(Values are of Spearman's Rank Ordered Correlation coefficient).

*P < 0.001

MRSS = Morning side rehabilitation status scale.

BPRS = Brief psychiatric rating scale.

KW = Krawiecka scale.

The duration of illness, however, had a negative correlation with the social rehabilitation status showing less effectiveness among more chronic cases:

Discussion

The experience of Fountain House Lahore, a pioneering facility in psychiatric rehabilitation in this country, has established its efficacy as a therapeutic community and has given a sense of direction to develop suitable programmes to achieve better management goals for chronic schizophrenics in the community. Like previous reports¹²⁻¹⁵ about the usefulness of the programmes of Fountain House, the present study of agrotherapy has also been found as an effective form of rehabilitation. The response of patients to agrotherapy has been very encouraging and marked changes were observed in the rehabilitation status of these patients during the three years follow-up period. The experience of agrotherapy, therefore, not only opens new avenues in the field of rehabilitation but also strongly recommends that all available resources should be utilized for the management of psychiatric patients. This becomes more true and relevant for the countries like ours where priorities for better mental health care are still at elementary levels. The modifications which were made in the original concept of Fountain House model and were based on our own needs also demonstrate that ideas originating from one country may have usefulness for other countries provided necessary modifications are made according to the prevailing sociocultural needs. It can also be concluded that the rehabilitation programmes in the form of agrotherapy can be suitable for countries having agro-based economy. It is hoped that this model can initiate, grow and thrive in developing countries and can also be fully incorporated with adaptations reflecting local conditions and circumstances in other countries. It is also suggested that these rehabilitation services which were started primarily for schizophrenics can also be extended to other psychiatric patients like chronic manic depressives, drug dependants and mildly mentally handicapped youth/adults. More studies exploring this important area in the field of social rehabilitation are also needed to evaluate further effectiveness of this therapy on a bigger sample which will go a long way in the provision of better health care facilities to mentally ill patients.

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