ORIGINAL ARTICLE

REHABILITATION SERVICES AT A TERTIARY CARE PSYCHIATRIC UNIT: A COLLABORATIVE MODEL OF DEVELOPING SERVICES BETWEEN PRIVATE AND PUBLIC SECTOR

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Submitted: July 12, 2018
Accepted: September 20, 2018

ABSTRACT

OBJECTIVE
To provide evidence of a new model of successful collaboration between private and public sector in providing occupational therapy (OT) as part of rehabilitation program for psychiatric patients.

STUDY DESIGN
Descriptive study

PLACE AND DURATION OF THE STUDY
The study was conducted in the rehabilitation center of the Institute of Psychiatry, BBH Rawalpindi in a period of eight years from March, 2010 to April, 2018.

SUBJECTS AND METHODS
A total of 2138 indoor patients participated in the study from Institute of Psychiatry. Data were collected over a period of eight years and analyzed using SPSS V23. The service has been running with mixed results for eight years and we are going to describe the turnover of patients based on the data collected during these years. The paper describes the results of this service from March, 2010 to April, 2018.

RESULTS
A total of 2138 patients were seen. Maximum number of patients was seen in 2014 to 2016. The predominance of 18 to 35 years indicates that the sample consisted of younger men and women, in the most productive years of their lives. 469 patients in the sample had no formal education, 477 were educated till primary, 363 had passed the middle school, 485 had done the metric examination. Mood disorders (depressive and bipolar) constituted around 50 % of the diagnosis. Predominant majority around 80% were discharged home with follow up services. 20% left against medical advice.

The yearly average stay of 32 days was reduced to 17 days and the yearly average delay of referral was reduced from 25 days to seven days.

CONCLUSION
Our study highlights the need for rehabilitation services in acute mental health settings for individuals with mental health problems. However, further work is needed to understand why bringing about change in this setting is so challenging.

KEY WORDS
Rehabilitation, Occupational Therapy, Holistic Medicine, Biopsychosocial Model

INTRODUCTION

The delivery of psychiatric rehabilitation interventions has been recognized as fundamental to facilitate recovery of people with severe mental illness world over.[1] Psychosocial rehabilitation of people suffering from mental illness is a proven way of improving quality of life, level of functioning (capacity) and re-integration into social life[2]. In Pakistan, few rehabilitation centers in private sector offer occupational therapy (OT) as a part of their services. The formal occupational therapy centers in public sector are non-existent. The patients in need of psychosocial rehabilitation with limited financial resources therefore rely wholly on their families for their care needs. The result is a huge additional care-givers' burden. The concept of rehabilitation is hardly acknowledged by the policy makers and health care professionals of our country. There is paucity of facilities for long stay psychiatric patients. The day care and community support services in the public and private sector are either absent or are poorly organized. There are no formal fully operative day care or community facilities for the chronic mentally ill.

Worldwide, the work of OTs in mental health and the range of services provided has changed significantly. This proportion of mental health care professionals is alarmingly low in Pakistan. Practically there are few psychotherapists, no rehabilitation and occupational therapy services, no separate unit for subspecialties, no appropriate long stay units, no concept of day centers or day hospitals and ill developed community services[3]. There is available evidence that even most disabling mental disorders, rehabilitation services can reduce symptoms, improve overall functioning, facilitate community integration and promote self-sufficiency[4-7]. Occupational therapy was founded on the principle that participation in meaningful activity is important to the health of individuals[8]. Where the inpatient setting was once the focal point of care, it is now widely accepted that the majority of care should be provided in the community setting[9]. The shift in the

focus of care being placed on treating people in the community in which they live has broadened the scope of practice for occupational therapists. However, this has meant that a greater emphasis has been placed on clinical interventions in the community setting, where service users are considered more ready to respond[10]. The average length of stay in acute mental health facilities ranged from 38 to 44 days in the United Kingdom[11]. In such situations, occupational therapists are required to assist the service users to engage in meaningful occupational roles both during and after their admission. Therapeutic use of activity, one of the core elements of occupational therapy, was commonly identified as one of the most useful aspects of intervention[12].

Different activities planned and assisted by an occupational therapist are creating and following a productive daily schedule, taking care of personal hygiene, managing one's own health, organizing and following a medication regime, interacting appropriately in work or social situations, working or volunteering planning and cooking healthy meals, managing budget and finances. There is additional evidence suggesting that several therapeutic goals, such as interaction levels and self-esteem, can be achieved by gardening activities[13]. These may have a positive role in the longer-term management of mental health, with 'green' interventions increasingly recognized in the promotion of well-being[14]. Ward garden spaces provide opportunity for graded participation in a number of green activities[15]. A great benefit of these is social inclusion as a way to provide a common identity.

A wealth of data has demonstrated that psychiatric rehabilitation of in patients with chronic schizophrenia can lead to the acquisition of new and important coping skills, a reduction of bizarre and inappropriate behaviors, a reduced likelihood of relapse, and better prognosis[16,17]. In developing countries over the past decade, rehabilitation has gained some acceptance as a means of fostering recovery for adults with psychiatric disabilities. However, it is under-utilized as a therapeutic tool when compared with pharmacological approaches; it also deserves to be better understood and resourced[2]. The work of occupational therapists within acute inpatient settings needs greater acknowledgement, reflection and debate[18].

Apart from the aforementioned barriers, there is also a paucity of current literature relating to occupational therapy practice in an acute mental health care setting especially in a developing country like Pakistan. Institute of Psychiatry has made attempts to organize the rehabilitation services, an innovation of entering an understanding with a nongovernmental organization. The model is being run successfully from about 8 years. This paper is aimed at exploring the details of the patients who benefited from the service.

SUBJECTS AND METHODS

Participants

A total of 2138 indoor patients participated in the study from Institute of Psychiatry & WHO collaborating Centre for Mental Health Research and Training center which is a tertiary care health facility and is an academic unit of Rawalpindi Medical University. The inclusion of sample was made through non probability purposive sampling technique on the referral of treating consultant in charge.

Instruments

The referral form described the bio data, symptoms and diagnosis of the patients; it also listed possibility for the range of activities that the rehabilitation unit was offering. These activities included arts and crafts, reading and writing, stitching, music therapy, games and sports, television watching, embroidery, horticulture, cooking and carpentry (see annexure A).

Procedure

After the ethical approval from concerned competent authority, referring consultant filled a referral form developed by the researcher and sent it to the rehabilitation center after obtaining informed consent. This rehabilitation center was comprised of space allocated by Institute of Psychiatry under the MOU with NGO. It is a spacious room with a large terrace, located on the first floor. The staff working at the center comprised of a medical doctor with a background in public health and two junior staff with previous experience in general nursing and school teaching. These staff helped patients through the occupational activities.

Data was entered and analyzed using SPSS V23. All the categorical variables were summarized as frequencies and percentages, and for the continuous variables means and standard deviations were computed.

RESULTS

The paper describes the details of beneficiaries of this service from March 2010 to April 2018. A total of 2138 patients benefited. Figure 1 described the details on yearly basis. Number of patients peaked in 2014 to 2016. Year 2015 received the maximum number of patients (393). 51% of the patients were female, while 49 % were male (see figure 2). Figure 3 described the distribution of the age of the sample. The predominance of 19 to 35 years indicated that the sample consisted of younger men and women in the most productive years of their lives. 53% of the sample was married, 41% unmarried, less than 4 % were divorced or widowed. Figure 4 described the educational background of the sample. 469 patients in the sample had no formal education, 477 were educated till primary, 363 had passed the middle school, 485 had done the matric examination. 168 had intermediate, 112 were graduates and only 64 had post graduate education.

Figure 1
Yearly Influx of Patients at IOP From 2010 To 2018

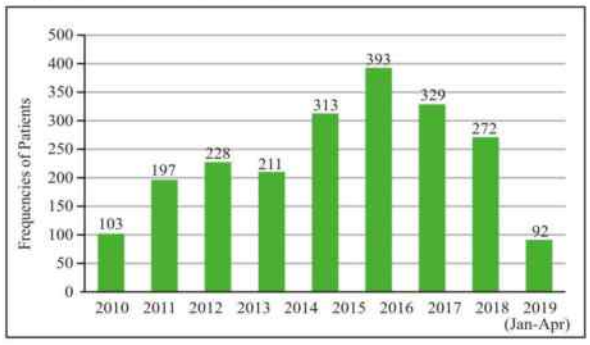


Figure 2
Gender Distribution of the Sample

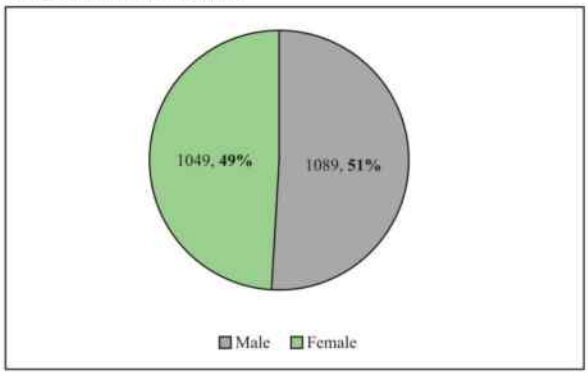


Figure 3
Age Distribution of the Sample

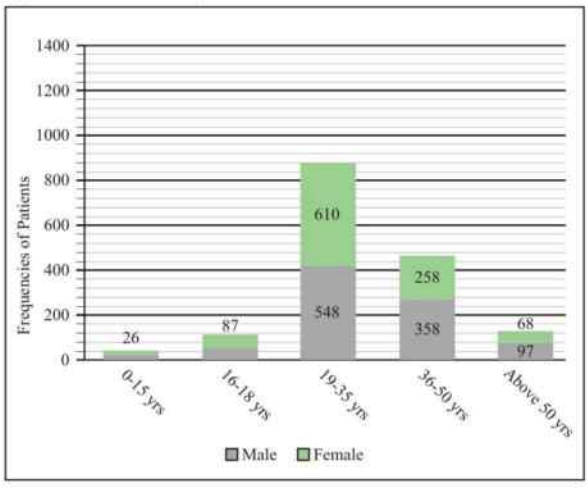
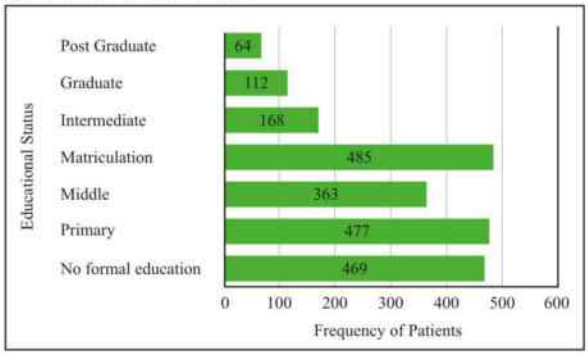


Figure 4
Educational Background of Patients



The top 10 diagnoses of the patients in this sample are shown in table 1. 45.5 % of the sample was diagnosed as having depressive illness; schizophrenia was around 14.5 % and bipolar mood disorders constituted around 11.2 % of the diagnoses. Table 1 also compared the breakdown of the diagnoses as per gender. Depressive disorders were 58% in female vs 42 % in males, schizophrenia was 56.6 % in males vs 43.4% in females. Bipolar mood disorders were about 60% in male vs 40% in females. Drug abuse showed more dominance in males 94.9% vs 5 % in females. On the other hand, dissociative disorders were 75.2% in female vs 24.8 % in males.

Table 1
Breakdown of the Diagnosis as per Gender

S.No	Diagnosis	Male		Female		Total	
		f*	%age*	f	%age*	f	%age**
1	Depressive Illness	409	**42.0**	564	**58.0**	**973**	**45.5**
2	Schizophrenia	176	**56.6**	135	**43.4**	**311**	**14.5**
3	Bipolar Affective Disorder	143	**59.6**	97	**40.4**	**240**	**11.2**
4	Drug Abuse	188	**94.9**	10	**5.1**	**198**	**9.3**
5	Dissociative Disorder	33	**24.8**	100	**75.2**	**133**	**6.2**
6	Personality Disorder	38	**45.8**	45	**54.2**	**83**	**3.9**
7	Behavioural Disturbances	21	**61.8**	13	**38.2**	**34**	**1.6**
8	Anxiety	13	**48.1**	14	**51.9**	**27**	**1.3**
9	Organic Disorder	26	**65.0**	14	**35.0**	**40**	**1.9**
10	Others	42	**42.4**	57	**57.6**	**99**	**4.6**
	Total	**1089**		**1049**		**2138**	**100**

*represents percent age of gender within a specific diagnosis
**represents percent age of specific diagnosis within total sample

Table 2 described the outcome of these patients at the end of study. Predominant majority around 80% were discharged home with follow up services. 20 % left against medical advice.
Table 3 described the yearly average duration of stay in the hospital vs. average delay of referral to the rehabilitation services. The yearly average stay of 32 days was reduced to 17 days and the yearly average delay of referral was reduced from 25 days to seven days.

Table 2
Status of Patients at the End of Hospital Stay

S. No	Status	Frequency of Patients	%age
1	Discharged	1665	77.9
2	LAMA	427	20.0
3	Day Patients	20	0.9
4	Continued (at the end of April, 2018)	9	0.4
5	Shifted to Other Wards	6	0.3
6	Dropped Out	9	0.4
7	Stopped from Coming to OT	1	0.0
8	Expired	1	0.0
	Total	**2138**	**100.0**

Table 3
Average Delay of Referral to OT and Average Stay in Hospital.

	Average Stay in Hospital	Average Delay of Referral to OT
	(Days)	(Days)
Year 2010	**32**	**25**
Year 2011	26	17
Year 2012	17	12
Year 2013	23	13
Year 2014	16	7
Year 2015	16	7
Year 2016	19	9
Year 2017	17	9
Year 2018 (till Apr-2018)	17	7

DISCUSSION

Rehabilitation component of psychiatric treatment has not received adequate attention in public sector institutions in Pakistan. In order to provide treatment on bio-psycho-social model of treatment, rehabilitation services are still in infancy. The performance of the service is discussed here in the backdrop of the limited number of mental health professionals, paucity of funds dedicated for occupational therapy and psychosocial rehabilitation services, disorganized services without adequate planning and constraints in the planning of services. Most of the teaching facilities are also the main training facilities in the country. It is therefore, imperative that the collaborative model developed at IOP provides a template for such services to be replicated in other similar institutions.

In the model described, the staff had been trained using the task sharing and task shifting principles of WHO. While this approach can function in the short term, but it would require replacement with staff trained on a culturally sensitive, core curriculum of rehabilitation training in Pakistan. There is a strong case for a certificate course in psychiatric rehabilitation, which can lead to a diploma. This will help in the development of human resource trained in OT and rehabilitation.

Rehabilitation interventions were seen useful in reducing the length of hospital stay in the United Kindgom[11]. In our sample, we saw a similar trend. Our sample reflects that the hospital stay was reduced from 25 days to seven days, once the consultants started to refer the patients for the service. Our patients especially, the male patients keenly participated in the activities planned at the OT particularly the green activities. As a matter of fact, they were responsible for the maintenance of plants in the building and kept the pots and plants alive and healthy. The data showed that the number of patients referred to the rehabilitation services grew steadily after the service was initiated. It reached its peak in year five. This explained the denial and the acceptance of the treatment made available. The consultants working in the institute needed several reminders and information regarding the newly organized service. Similarly, the referral rate in subsequent years indicated a decline once the reminders were withdrawn as the leadership was negotiating other important issues administratively.

Of the many challenges for the initiation and delivery of such rehabilitation services in Pakistan, it will require the leadership of the head of the institution to develop similar models in their respective units. There is a lack of cooperation and support by the government as well as the policy makers who are important stake holders. All of them need to join hands to fight the culture of stigma. In our society, the strengths and pitfalls of family support for dealing with severe mental illness needs to be carefully monitored and harnessed for the care giving role. Until these facilities are developed, most of care burden will be delivered by the family.

Individuals of all ages who are diagnosed with a mental illness can benefit from occupational therapy by developing the skills needed to live life to its fullest. Furthermore, friends and family members can also benefit from these services to learn ways to deal with the stress of care giving and how to balance their daily responsibilities to allow them to continue to lead productive and meaningful lives.

CONCLUSION

Our study highlighted the need for rehabilitation services in acute mental health settings for individuals with mental health problems that may be fulfilled by a public private partnership model. However, further work is needed to understand why bringing about change in this setting is so challenging.The change of paradigm in psychiatry implies the creation of services for the social inclusion of people with severe mental illness.

This study rises hope of successful implementation of psychiatric rehabilitation services even against heavy odds and material and human resource constraints.The study demonstrates the success of an out-of-the-box solution by bringing together the public and private sectors in mental health care settings.

ACKNOWLEDGEMENT

We thank our colleagues and staff members at the Institute of Psychiatry, Benazir Bhutto Hospital, Rawalpindi who provided the necessary support that greatly assisted the research. We are also thankful to Dr. Ghazala Afzal Hameed (Founder and Chairperson, Concern for Mental Health) and Mrs Saddiqa Malik for the immense support. We are also indebted to Dr. Saeed Farooq for his initial remarks on the draft of this paper.

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