



# Public–Private Partnership (PPP) Model of Psychiatry Day Care Center in India: Its Challenges and Opportunities—A 2-Year Experience

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## Abstract

**Background** Most patients admitted in day care center are suffering from schizophrenia who do not recover fully due to nagging negative symptoms and cognitive deficits which linger and persist making the patients unfit and unacceptable for employment. But regular employment can help in recovery. In this way, day care centers would help in recovery of patients and hence the need for these kinds of centers. In India, day care centers are in infancy stage and to a larger extent are inadequately used. There is no data available from psychiatry day care center run as public–private partnership (PPP) project in a tertiary care general hospital psychiatry unit (GHPU). This model is first of its kind in India. Here, we narrate experiences gained in last 2 years.

**Objectives** This article narrates the challenges and opportunities in a psychiatry day care center in PPP model.

**Materials and Methodology** It a cross-sectional study.

**Description of day care center:** Day care center was started as PPP model called Manasadhara model in the state of Karnataka, first of its kind in India.

**Recruitment** Patients currently asymptomatic are recruited into the center after initial interview/assessment of patients and family members from the in-charge psychiatrist after obtaining informed consent.

**Statistical Analysis** Data are analyzed using mean and median mode. A *p*-value of < 0.05 was considered significant. Appropriate statistical methods were applied.

**Results** Total number of patients recruited in the study were 33 (*n* = 33). Mean age of the patients was 34.5 (7.4) years.

Majority (51.52%) of patients were in the age group of between 26 and 35 years. Majority (51.52%) of patients' age of onset of illness fell between 21 and 30 years, and 63.64% of patients' duration of illness ranged between 11 and 15 years.

## Keywords

- day care center India
- challenges
- opportunities

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**Conclusion** Running a day care center in PPP model that too in a GHPU set up is difficult. Skills in which patients need to be trained should be decided based on patients' profile and cultural basis of the place. Common problems faced were poor placements, transportation, financial difficulties, and poor funding.

## Introduction

In 1930, day care centers started in the Union of Soviet Socialist Republics as an alternative to hospitalization. By 1950s, it became popular in the West and was seeing its success by 1970s. Later these centers started becoming unpopular as it was presumed that home care treatment was more appropriate and cost effective.<sup>1</sup>

The term "day care" is not easily defined and is best clarified by first defining the functions of day care and then relating these to the various structures to provide them: to provide an alternative to inpatient care, shorten its duration and promote recovery, and maintenance in the community. These three functions can be provided by day care programs from three different sources: day hospitals, employment services, and social care facilities.<sup>2</sup>

In the West by 1930s process of deinstitutionalization began to promote social inclusion of mentally ill patients. To overcome the problems faced, community mental health services were started but soon led to failure due to two reasons, one is that there were set of patients who did not improve and other reason being poor implementation of the services. To overcome these, concept of rehabilitation was developed.<sup>3</sup>

Most patients admitted in day care center suffer from schizophrenia who do not recover fully due to nagging negative symptoms and cognitive deficits which linger and persist making the patients unfit and unacceptable for the employment. But regular employment can help in recovery. In this way day care centers would help in recovery of patients and hence the need for these kind of centers. In India day care centers are in infancy stage and to a larger extent are inadequately used.<sup>4</sup> There is no data available from psychiatry day care center run as public-private partnership (PPP) project in a tertiary care general hospital psychiatry unit (GHPU). This model is first of its kind in India. Here, we narrate experiences gained in the last 2 years.

## Aims/Objectives

To narrate the challenges and opportunities in a psychiatry day care center in PPP model.

## Methodology

It is a cross-sectional study.

Description of day care center: Day care center was started as PPP model called Manasadhara model in the state of Karnataka, first of its kind in India. A memorandum of understanding (MoU) was signed between the college and

the government in April 2017, as per the regulations laid by the government. The day care center is located in the premises of the hospital and is managed by the department of psychiatry.

## Recruitment

Patients are recruited into the center after initial interview/assessment of patients and family members from the in-charge psychiatrist. Patients who are diagnosed with mental disorders and are currently asymptomatic but need rehabilitative care are recruited into the center. Patients are expected to stay for rehabilitation training for a period of at least 3 months. Data was collected from July 2017 to July 2019.

## Staff

It consists of a psychiatrist, a social worker/occupational therapist, a clinical psychologist, a music teacher, yoga trainer, tailoring instructor, and a computer instructor.

## Activities at the Center

Patients come to the day care center by 9 a.m. and go back to their homes by 4 p.m. During their stay various activities are performed as per the schedule. Cognitive remediation techniques, social skill training, group therapy, and individual counseling to the patient and family members are provided. Also, music therapy, yoga therapy, gardening, tailoring, and basic computer learning is provided by the respective instructors. The training provided is as suggested by the government in the MoU. Patients can come on their own or along with their caregiver who are supposed to drop and pick up their patients at their own risk. During their stay in the center lunch is provided free of cost to the patients by the hospital.

Periodic meetings are conducted to review the progress of the center. It is attended by the Principal, Medical Superintendent, In-charge Psychiatrist of both government and private entities, the district health officer (DHO), in-charge district mental health officer, a representative from a non-governmental organization (NGO), and a representative on the behalf of one of the patients admitted in the day care center.

## Results

### Sociodemographic Details

Total number of patients recruited in the study were 33 ( $n=33$ ). Mean age of the patients was 34.5 (7.4) years.

Majority 31 (93.94%) came from urban background, and the rest came from rural back ground 02 (6.06). There

socioeconomic status is as follows as per BG Prasad's classification: Class IV 22 (66.67%), Class III 10 (30.30%), and Class II 1 (3.03%).<sup>5</sup>

Majority (51.52%) of patients were in the age group of between 26 and 35 years. Note that 36.36% of patients were between 36 and 45 years of age. Also, 6.06% were in the 15 to 25 and > 46 years age group. Majority (51.52%) of patients' age of onset of illness fell between 21 and 30 years, while 45.45% were between 11 and 20 years and 3.03% were between 31 and 40 years. Note that 63.64% of patients' duration of illness ranged between 11 and 15 years, while 03.03% of patients' illness duration was less than 5 years. Note that 30.30% patients' illness duration ranged between 06 and 10 years, only 1 patient (03.03%) had illness lasting for more than 16 years (►Table 1).

International Classification of Diseases 10th Revision Diagnostic Criteria for Research was used for the diagnosis. Majority (87.88%) of the patients was suffering from schizophrenia, 06.06% of patients were diagnosed with mood disorders, few (06.06%) patients had diagnosis of obsessive-compulsive disorder, and diagnosis of substance

**Table 1** Sociodemographic details

Mean age (in y)	34.5 (±7.4)	
Sex		
	Male	Female
	30 (90.90%)	03 (09.10%)
Background		
	Urban	93.94%
	Rural	06.06%
Socioeconomic status		
	Class IV	66.67%
	Class III	30.30%
	Class II	03.03%
	Class I	00.00%
Age group range (in y)		
	15–25	02 (06.06%)
	26–35	17 (51.52%)
	36–45	12 (36.36%)
	> 46	02 (06.06%)
Age of onset of illness(in y)		
	< 10	00.00%
	11–20	45.45%
	21–30	51.52%
	31–40	03.03%
Duration of illness (in y)		
	< 5	03.03%
	06–10	30.30%
	11–15	63.64%
	> 16	03.03%

**Table 2** Diagnosis of patients, N = 33

Diagnosis (ICD-10)	Total	%
Schizophrenia	29	87.88
Mood disorders	02	06.06
Others	02	06.06

Abbreviation: ICD-10, International Classification of Diseases 10th Revision.

**Table 3** General observations

	%
Patients completed 3 months treatment course	62
Patients employed after discharge	38
Financial difficulties	62
Transportation difficulties	80
Job placements difficulties	62
Poor family support	42
Stigma	25

use disorders were grouped under the “others” category (►Table 2).

A total of 33 patients were enrolled, of which 62% of them completed 3-month treatment course. Note that 38% of patients were employed after discharge. Around 31% of patients discontinued their stay before 3 months due to various reasons. Most patients (90%) had job placements-related problems. Note that 80% clients faced problems related to transportation, 62% of patients had financial difficulties, 42% of patients had poor family support, and 25% patients faced stigma-related issues (►Table 3).

## Discussion

The state government came out with ambitious plan to have residential day care centers which later were changed to nonresidential day care centers to be housed in district hospital premises. Budgetary allocations with how and on whom it is to be spent and the necessary list of resource persons and the areas in which the patients should be trained and for what period were specified. Our center started as PPP project, since for various reasons it did not materialize in the district hospital. Suitable place in our hospital premises which is very user- and patient-friendly but at the same time provided suitable privacy was identified and procured. As it is said easier than done, when the day care center started functioning we had a poor response. Our team conducted initial awareness program in and around the city covering up to 200 km. We advertised through banners and distributing pamphlets. We also informed all the psychiatrists practicing in and around the city. Social organizations like Rotary clubs and some NGOs were also informed. Efforts were made to inform all the patients and their relatives who visited department of psychiatry for

treatment. All medical officers, health workers, Anganwadi workers, etc., with the help of DHO/additional district mental health officers were approached, sensitized, and requested to refer suitable persons in their areas. Indian Medical Association branches in and around the district were informed. Medical practitioners, opinion makers, and social workers were approached.

In a study done in India by Agarwal et al showed 71% of patients who were admitted in day care center had a diagnosis of schizophrenia as compared with our study which accounted for 88%, this shows that majority of patients who get admitted suffered from chronic illness like schizophrenia. However, only 06.06% admitted were diagnosed to have mood disorders in contrast to 16% in the Agarwal et al study. This difference could be because patients with mood disorders either relapsed which may be the reason for discontinuation in the day care center, or another reason could be they remain asymptomatic and get discharged faster. Comparing time spent in illness, both the studies showed that most of the patients were in same age group, that is, between 6 and 10 years, indicating that duration of illness was at least 5 years before they were enrolled in the day care center. Note that 51.52% of our study patients' age of onset of illness was between 21 and 30 years.

In our study, 62% completed 3 months as compared with only 50% in the Agarwal et al study. This difference could be because most patients found day care center useful. Our study showed less number of patients (38%) got employed after discharge as compared with 49% in the Agarwal et al study. This could be because patients were unfit for employment or had symptom relapse or employers refused to give any employment at various places. Sixty-two percent of our patients had financial difficulties which was one of the major reasons for discontinuation.

Sixty-two percent of patients after discharge had employment difficulties, most did not find a job. This tells us that patients with psychiatric illness are either refused employment or are considered that they are less efficient than others. It could also be possible that these patients could be staying at home and helping family members in household activities, as this is a common attitude of families toward psychiatric illness patients.

Forty-two percent of our patients had poor family support in the form that, there was no single person to look after on a regular basis. Hence, patients were not brought to day care center on a regular basis. Invariably, these patients did not do well. Some patients experienced negative expressed emotions.

The two most common problems which were faced by patients/families were: most of them complained that their expenses increased in taking care of patients and also in spending extra money in transportation. Here, we suggest that government can provide free bus passes for the patients and concession to one caregiver in public transport so that their financial burden could be reduced. Also, most families expect/request for a residential place. Many NGOs/private institutions may be wary of this model for logistic, safety, and medico-legal problems.

Second common problem was rehabilitating these patients, more than 50% were not rehabilitated. The reasons could be ours is a day care center run in a GHPU where the college does not have any links to small-scale industries where patients can be employed. These kind of attachments are present in central institutes like National Institute of Mental Health and Neuro-Sciences where most patients get rehabilitated. Second, the place where the day care center is situated in a district place there might not be enough employment opportunities. Our district does not have a large number of industries. The skills in which a patient is to be trained needs to be decided by the patient profile, the socio-economic status, and geographical characters of the place where the center is situated. Agriculture, horticulture, and dairy are the main occupation where most of our patients could be rehabilitated or trained and retrained. But the place, space, and location area available need to be appropriate and sufficient. So we feel that in a general hospital unit setting it is difficult to rehabilitate all patients. To generate employment our center has employed two patients in our own hospital. By doing so, we have spread awareness and reduced stigma. Recreational aspects, cognitive remediation, physical fitness, and training in soft skills like basic computer learning are possible in day care centers like ours.

From the management point of view the following hurdles were faced. Since it is mandate that occupational therapist (OT) be present at day care center, it is difficult to get an OT at district places. Second, since it is a MoU between government and private college, the funding comes from the government. It is observed in the past 2 years that the funding has always been irregular and most of the employees feel that it is inadequate. We suggest that a separate fund allocation for running a day care center be made at the government level which will allow for smoother functioning and encourage better functioning of the center. Also, we have learnt that the need of clinical psychologist at the day care center is minimal. Instead, the salary paid to the clinical psychologist can be diverted to manage other affairs at the day care center.

## Conclusions

- Of the 33 patients who joined the day care program, 62% could continue regularly.
- Nearly 38% could take up jobs.
- Social and occupational behaviors improved.
- Note that 36% discontinued due to various reasons.
- Running a day care center in PPP model that too in a GHPU set up is not easy.
- Skills in which patients need to be trained should be decided based on patients' profile, socioeconomic status, and cultural basis of the place where the day care center is located.
- Common problems faced were poor placements, transportation, financial difficulties. and poor funding.

## Conflict of Interest

None declared.

## References

- 1 Marshall M, Crowther R, Sledge WH, Rathbone J, Soares-Weiser K. Day hospital versus admission for acute psychiatric disorders. *Cochrane Database Syst Rev* 2011;(12):CD004026
- 2 How effective are different types of day care services for people with severe mental disorders? WHO Regional Office for Europe's Health Evidence Network (HEN). July 2005
- 3 Killaspy H. Contemporary mental health rehabilitation. *East Asian Arch Psychiatry* 2014;24(03):89–94
- 4 Agarwal AK, Rai S, Upreti MC, Srivastava AKSheeba. Day care as an innovative approach in psychiatry: analysis of Lucknow experience. *Indian J Psychiatry* 2015;57(02):162–164
- 5 Vasudevan J, Kumar Mishra A, Singh Z. An update on B. G. Prasad's socioeconomic scale: May 2016. *Int J Res Med Sci.* 2016;4:4183–4186