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Intervention for first episode psychosis in India – The SCARF experience

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ABSTRACT

Introduction: There have been very few studies or programs in India on early intervention for first episode psychoses. This paper reports the findings of a pilot program, part of a collaboration with the Prevention and Early Intervention Program for Psychoses, Montreal.
Methodology: A sample of 47 patients with first episode psychosis were followed up for 2 years. Complete data was available on 39 subjects at 2 years. This data was analyzed for socio-demographic and clinical variables and its relationship with outcomes and DUP. Those who had a PANSS score <60 and GAF >80 were categorized to be in remission ($N = 28$) and others as continually ill ($N = 10$).
Results: There was significant improvement from baseline to 1st year with maximal improvement seen at 3 months after intake. However, improvement between 1 and 2 years was not significant. More women relapsed and more men dropped out. 25 out of 28 subjects with shorter DUP (<2 years) were in remission at 2 years as against 3 out of 10 with >2 years DUP. Three different patterns of course of the disorder were found. Single episode followed by total remission for 2 years ($N = 20$; 52.6%) was the commonest. The others were relapses followed by remissions ($N = 8$; 21.1%), and continuous illness ($N = 10$; 26.3%).
Conclusion: Early intervention is effective and more so if DUP is shorter. PANSS scores and GAF at baseline are not predictive of later outcomes. Medication adherence in therapeutic engagement and psychosocial needs should be considered in the implementation of early intervention programs in our cultural context.

1. Introduction

A majority of individuals with schizophrenia and related psychotic disorders live in the developing world, about 7–8 million in India alone (Thara, 2005; World Health Organization, 2001). The DOSMeD study found that acute psychosis is more prevalent in developing countries and among females (Sartorius et al., 1986). The last decade has witnessed an upsurge of research on early intervention for psychotic disorders. Early intervention can minimize relapses and maximize recovery, as outcome in the early years significantly predicts long-term illness course (Birchwood et al., 1998; Malla et al., 2005; Penn et al., 2005).

There have been very few studies or programs in India on early intervention for first episode psychoses. While there have been some studies reporting on chronic, untreated schizophrenia in India (McCreadie et al., 2002, 2003, 2005), very little information is available on Duration of Untreated Psychosis (DUP).

A first episode psychoses program was started at the Schizophrenia Research Foundation (SCARF) in collaboration with the Prevention and Early Intervention Program for Psychoses (PEPP), Montreal. This paper describes a pilot study of this program.

The objectives are:

1. To study the course and outcome of persons with untreated first episode of psychosis.
2. To identify factors affecting outcome.
3. To assess DUP and its impact on outcome in psychosis.

2. Methodology

2.1. Study site

Tamil Nadu is one of the more developed and industrialized states in India. The state also has better heath care facilities than many other Indian states. The main language is Tamil, although a lot of people also speak English. The city of Chennai, the capital of Tamil Nadu has a population of 4.7 million (DCO, 2011).

SCARF is a not for profit organization located in Chennai. It is a referral centre for rehabilitation of persons with severe mental

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disorders and also an active research centre. The outpatient department works in the mornings, 5 days a week and is manned by a multi-professional team. An average of 80 patients is seen in the OPD and there are facilities to admit about 140 patients.

2.2. Selection of subjects

The sample was selected from patients attending the SCARF OPD from April 2007 to November 2008. The majority of the patients are from Chennai city and its suburbs, but about 13.7% are from the districts and other parts of India.

Out of 2075 new patients who attended OPD during the study period 793 had psychotic illness, out of which 284 patients had first-episode psychosis. However, only 103 met the study criteria and 181 were excluded. The reasons for exclusion were:

1. antipsychotic treatment of more than a month (37%),
2. insufficient severity of symptoms (30.4%),
3. IQ lower than 70 (23.2%),
4. age greater than 50 years (22.6%),
5. psychosis secondary to a medical condition (22.09%),
6. a primary diagnosis of substance dependence/abuse (11.60%).

Of the eligible 103, 80 persons were approached for consent. Twenty three patients were not approached, all of whom had made only a single visit to the clinic. Since we had to ensure that they did indeed come for the second time to the clinic, most recruitment happened only at the second visit (7–15 days from 1st visit).

Thirty three patients did not consent. One of the major deterrents for not participating in the study was the need for regular visits to the centre and time spent on extensive assessment. Forty seven persons who consented were recruited, of whom 38 completed follow-up for 2 years. The profile of the 47 patients (Table 2) comprising the study sample did not differ significantly from the 56 patients who were excluded (see Table 1). The age of onset (27.34, *SD* 7.74 vs 28.64, *SD* 7.23), DUP (28.97, *SD* 38.15 vs 20.74, *SD* 38.11) and presence of substance use (10.7% vs 7.1%) was comparable across both these groups (included vs excluded) when analyzed using chi square and *t*-test.

The study team comprised of a psychiatrist, a psychologist and a social worker.

2.3. Inclusion criteria

2.3.1 A current primary diagnosis of a non-affective psychotic disorder (schizophreniform, schizophrenia, schizoaffective, psychosis NOS) as per DSM-IV.
2.3.2 Not received antipsychotic medication for longer than 1 month.
2.3.3 Age ≤50 years at study intake.
2.3.4 Have active psychotic symptoms which meet threshold criteria on the Structured Clinical Interview for DSM-IV-TR (SCID; First et al., 2002) or a minimum global rating of 3 on at least one of the following dimensions – hallucinations, delusions or thought disorder – of the Scale for Assessment of Positive Symptoms (SAPS; Andreasen, 1984) at the time of entry.
2.3.5 Be able to communicate in Tamil or English.
2.3.6 Have an IQ above 70.
2.3.7 Not suffer from other central nervous system disorders such as epilepsy, psychosis secondary to a medical condition or with a primary diagnosis of substance dependence/abuse. Concurrent diagnosis of substance abuse will not be an exclusion criterion as long as a psychotic disorder is the primary diagnosis.

Table 1
Comparison of intake data between those included and excluded.

		Included ($N=47$)	Excluded ($N=56$)	*P* value
Gender	Male	14 (29.8%)	20 (35.8%)	0.524
	Female	33 (70.2%)	36 (64.2%)	
Mean age in years		29.74 (*SD* 8.7)	30.41 (*SD* 7.2)	0.669
Mean education in years		10.6 (*SD* 4.6)	8.35 (*SD* 5.3)	0.024*
Marital status	Never married	24 (51.1%)	24 (42.8%)	0.526
	Married	20 (42.6%)	30 (53.6%)	
	Separated	2 (4.3%)	2 (3.6%)	
	Widowed	1 (2.1%)	0 (0%)	

* Significant.

2.4. Assessment tools

Sociodemographic data was collected on a semi structured proforma.

Psychopathology was assessed using Positive and Negative Syndrome Scale for Schizophrenia (PANSS) (Kay et al., 1987), and functioning was measured using Global Assessment of Functioning Scale (GAF) (Endicott et al., 1976). They were administered every month for 3 months, and subsequently at 6, 9, 12 and 24 months with a window period of 7 days. PANSS and GAF were administered by a single rater (RM), a psychiatrist who was trained on the scale and had good (*kappa* 0.83) inter-rater reliability with the PEPP team in Montreal.

The scale Circumstances of Onset and Relapse Schedule (CORS) (Norman et al., 2004; Malla et al., 2006) was used to assess duration of untreated psychosis.

DUP was defined as the period from the onset of the first psychotic symptom to the initiation of adequate treatment. This was categorized as short duration if it was 2 years or less and long duration if it was greater than 2 years. Patients were interviewed by trained raters using the Tamil version of SCID-P which had been validated on a Tamil population in nearby Vellore (Saravanan et al., 2007). The SCID interview was done at baseline 12 and 24 months for establishing diagnosis with a 1-month window.

Three different patterns of course of the disorder were single episode followed by total remission for 2 years, relapses followed by remissions, and a continuous illness. At 2 years, patients were categorized as being "in remission" if PANSS scores were ≤60 (Opler et al., 2007) and GAF scores were >80. Those who did not fulfill the criteria of being in remission at any point of time during the 2-year period were classified as being continuously ill.

2.5. Intervention

This was intensive and had medical and psychosocial components.

The pharmacological management included both first (haloperidol, chlorpromazine) and second generation (olanzapine, risperidone) antipsychotics.

Anti depressants and benzodiazepines were added when deemed necessary. Drugs were generally issued for 2 weeks or a month at a time. This is in line with the routine treatment at SCARF.

All patients recruited into the program received the psychosocial interventions delivered by the study psychologist and social-worker. The interventions were targeted at both the patient as well as the caregiver who played a major role in facilitating treatment.

The main goals of the intervention were to build a collaborative relationship to facilitate treatment compliance, improve functioning and quality of life. Psychoeducation included information on