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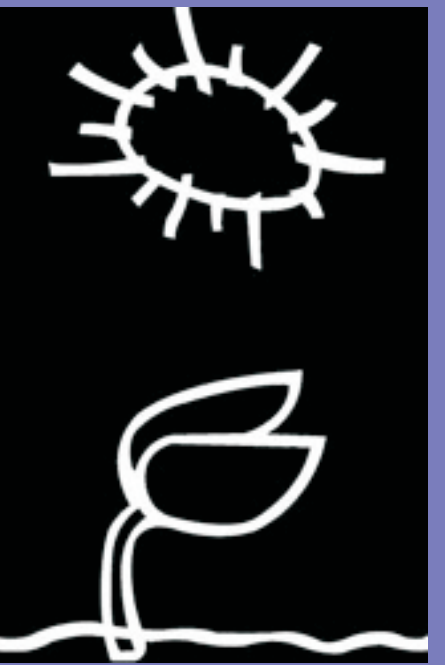


# Outcome in Schizophrenia

## The Long-Term Good Outcome in Schizophrenia is Not Yet Good Enough

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### Abstract

**Introduction:** The illness of schizophrenia has always been a matter of concern for its nature and extent of outcome particularly for its regional and cultural differences. The concept of outcome has been evolving and this study examines the scenario of good outcome in developing countries.

**Objective:** To study the status of 'long-term' Outcome of Schizophrenia in metro city of developing Country, Mumbai, India.

**Methods:** Re-examination of recovered patients in ten years long term, naturalistic, prospective study using Meltzer et al's 13 outcome criteria & on a new outcome scale

**Results:** The recovered patients (N=67, 62.7% on CGIS) of available 107 at ten years had deferential outcomes. On a new scale of outcome 30% had poor social functioning, 50% had loss of productivity, 66% were not economically independent, and 69% could not peruse desired education, 25% lived with significant suicidal intents, 63% experienced rehospitalization, and 57% experienced exacerbation of symptoms

On conventional criteria, 70% had persisting positive symptoms, 53% had negative symptoms, present in some form. 76% patients were free from EPS side effects; 62% had improved in Interpersonal function; 43% were capable of independent living; 50% showed cognitive decline; 68% showed improved quality of life; 38% had hospitalization within previous 2 year; 60% had significant family burden and 32% some or the other kind of social burden; 23% were still living with suicidal thoughts, 50% resumed work/school and sustained; 58% had GAF more than 80.

**Conclusion:** Schizophrenia is a complex neurobehavioral disorder with limited outcome. Half of the patients improve with no concomitant difficulty while another half improves varieties of disability.

1993 Phase I N=200	Follow period for 10 years Phase II Drop outs:93	2003 Phase III N=107	Present study Good outcome: 67
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Study parameters:

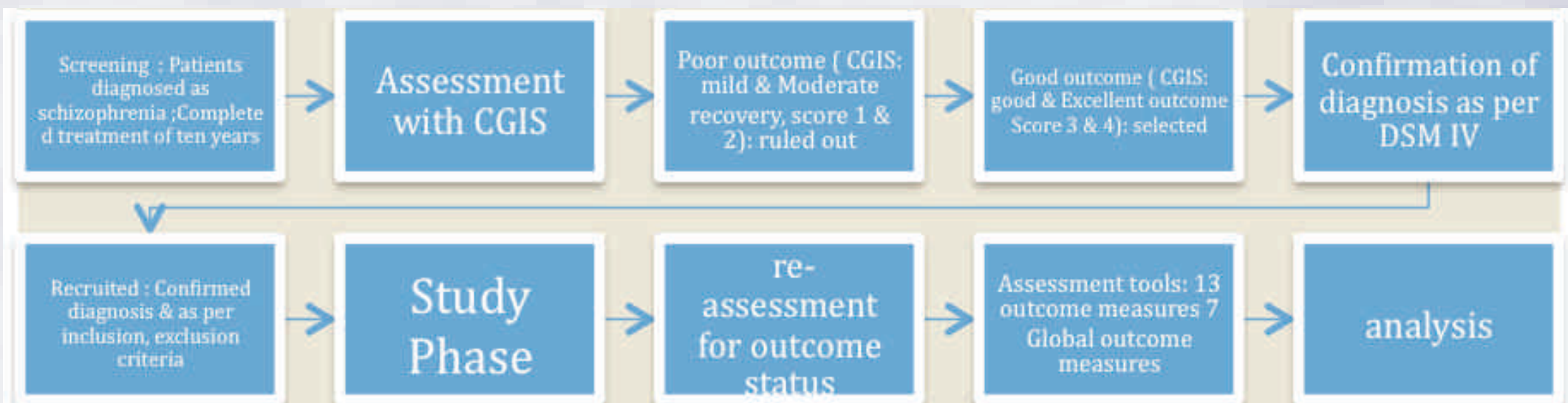
- Demography
- Clinical parameters
- Meltzer's 13 Outcome criteria
- New outcome measure.
- PANSS
- CGIS

### Results

Study Site	Mumbai, INDIA PRERANA Psychiatric Services & Silver Mind Hospital
Nature of Study	Cross-Sectional, Open level, Cohort Study
Selected & assessed	107
Recruited as per Criteria (Good Outcome)	67

Mean age	49.3 ( range 36- 58 years ) SD 8,
male	42
female	25
Mean duration of illness	16.5 years
Mean Duration of Treatment	12.5 years

### Methods



In a cross sectional, Naturalistic, cohort study, patients showing good outcome at the end of ten years treatment, were recruited as per inclusion criteria.

These patients were re-assessed for the status and quality of recovery using Meltzer et al's 13 outcome criteria Results were analyzed

Inclusion Criteria:	Exclusion Criteria:
Diagnosis of Schizophrenia as per DSM;	Significant Organicity;
Completed treatment of ten years Duration,	Epilepsy, Head Trauma, CNS diseases;
Good outcome recovery status- Clinically; CGIS : minimum level of recovery as Good and excellent (Minimum score 3 or 4);	Inconsistent treatment; Poor compliance;
Evidence of good compliance	Lack of adequate information;
	Current medical illness of severe nature

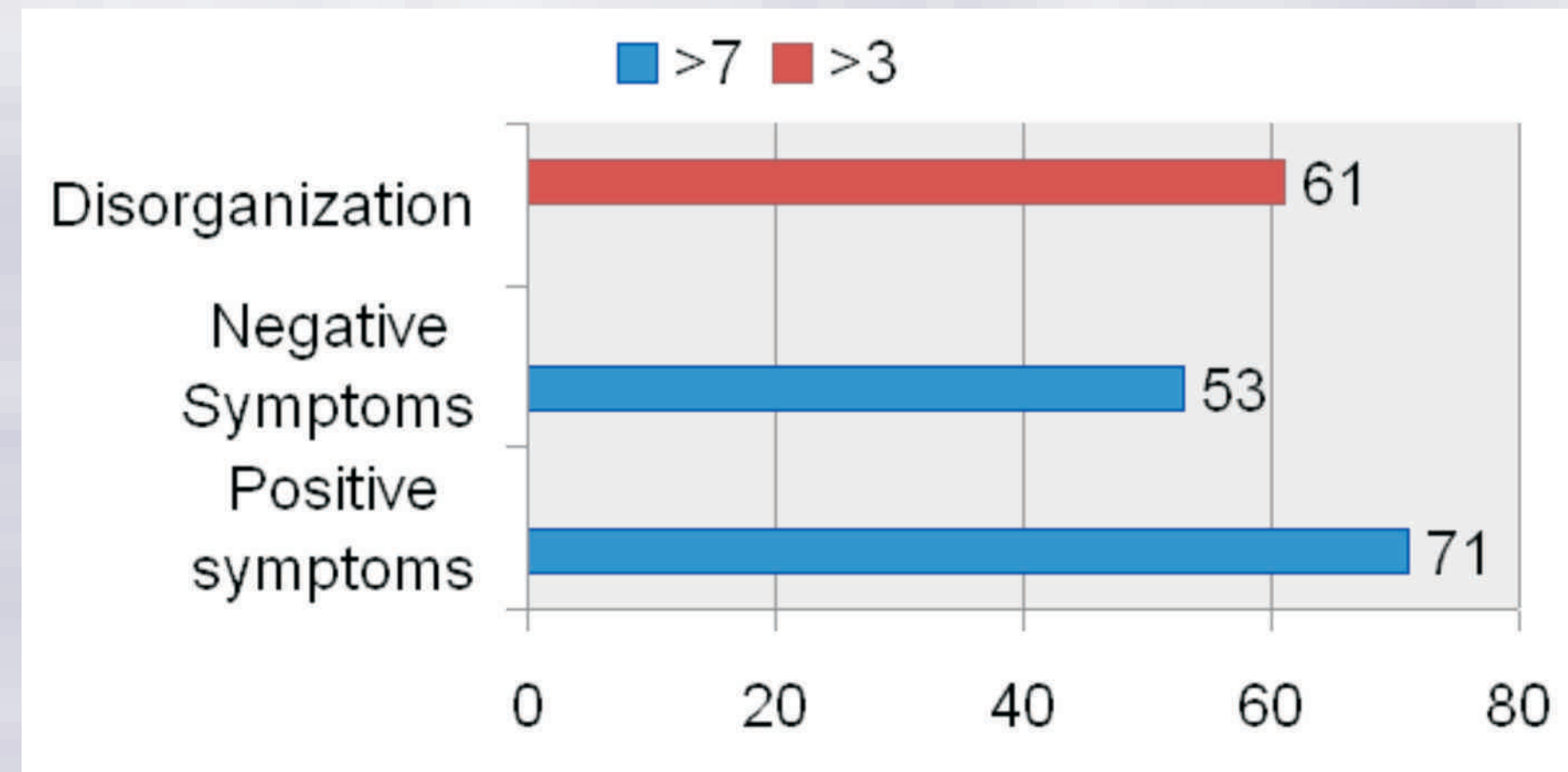
**Multiple outcome criteria in schizophrenia:**

**Various parameter quantified based on clinical outcome and using popular scales for measurement**

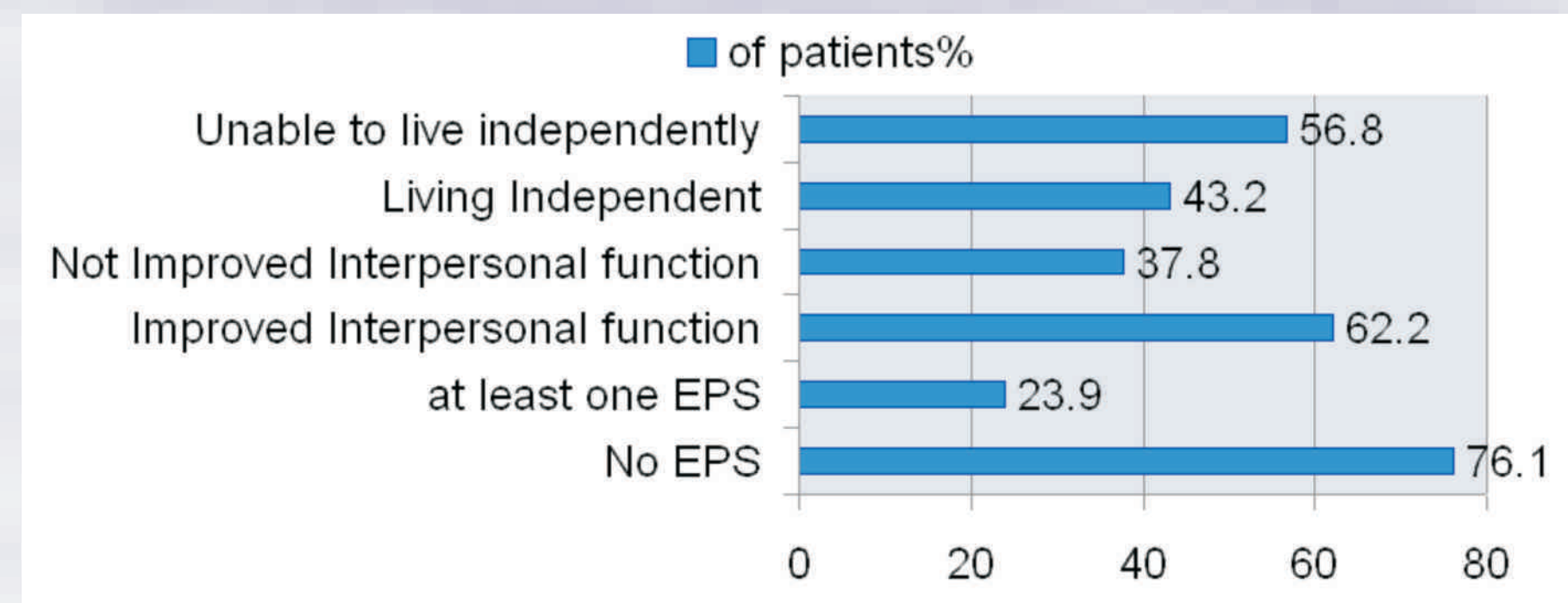
Thirteen criteria

1. Psychopathology (positive symptoms, negative symptoms and disorganization)
2. Cognitive function (attention, executive function, working memory, recall memory, semantic memory, storage memory)
3. Interpersonal social function
4. Work-school function
5. Extra pyramidal function (parkinsonism, akathisia, tardive dyskinesia)
6. Independent living
7. Aggression
8. Quality of life
9. Compliance
10. Hospitalization
11. Family burden
12. Social burden
13. Suicidality

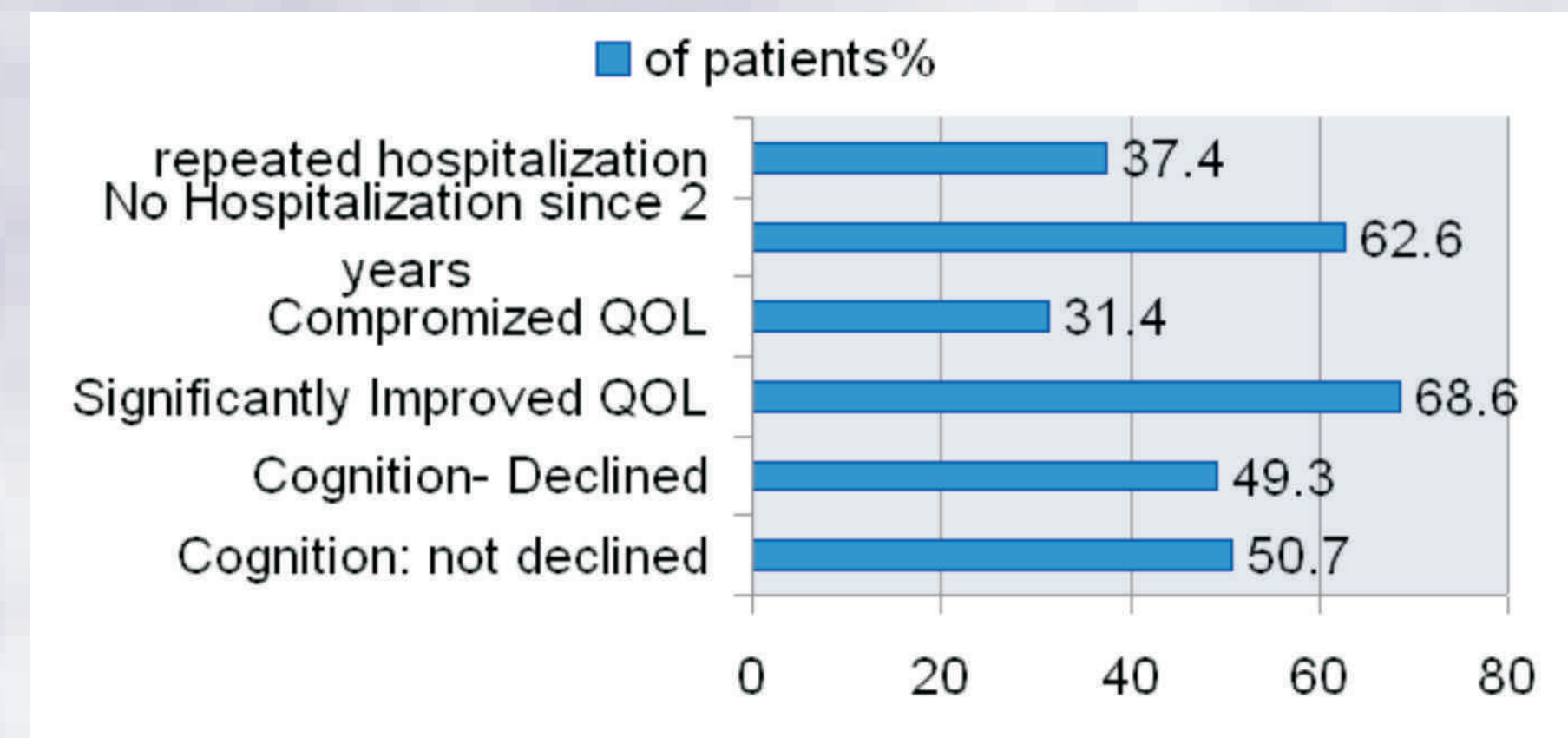
### Outcome variable: Status at 10 Years Persistent Symptoms



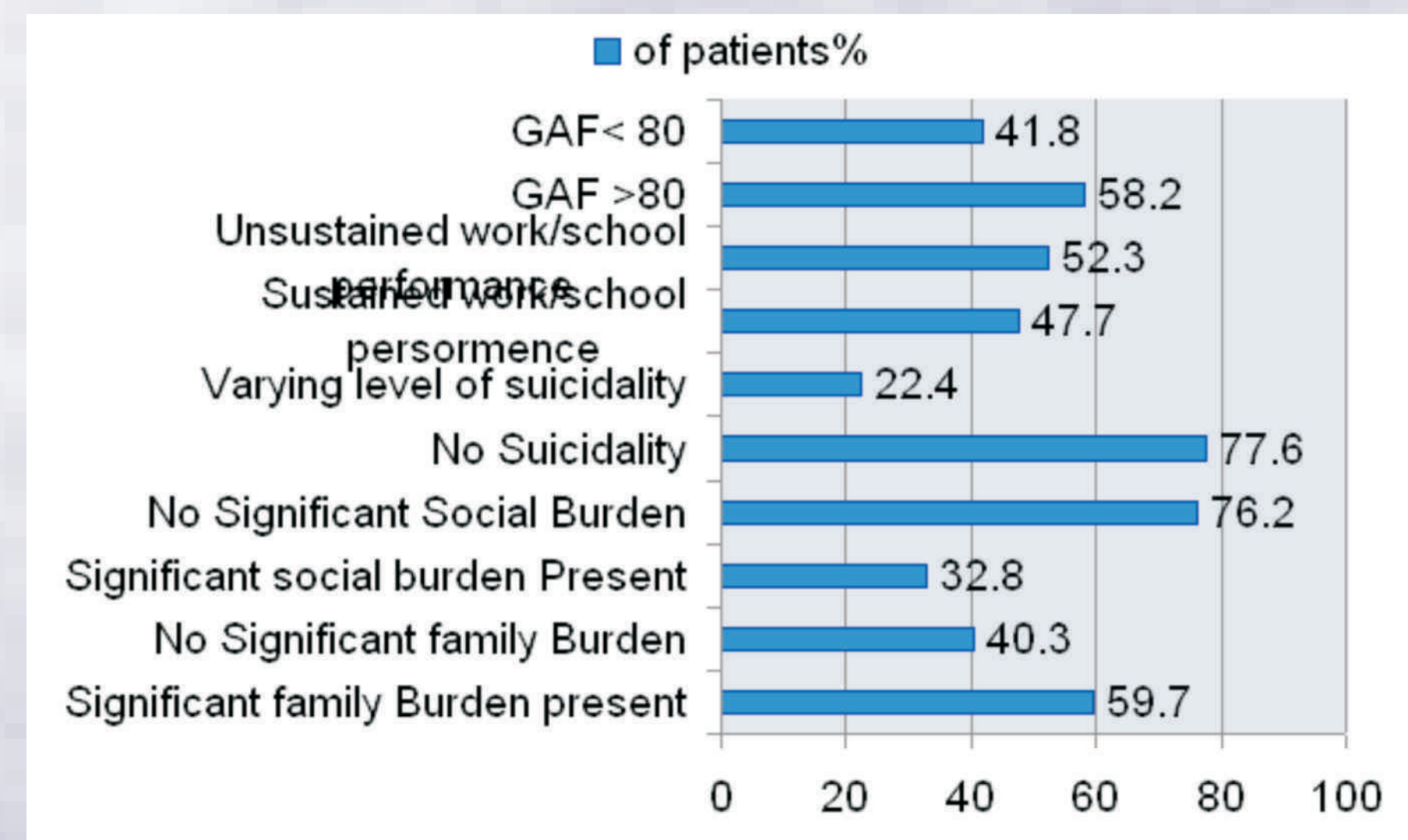
70% had persisting positive symptoms, 53% had negative symptoms, present in some form.



76% patients were free from EPS side effects; 62% had improved in Interpersonal function; 43% were capable of independent living



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60% had significant family burden and 32% some or the other kind of social burden; 23% were still living with suicidal thoughts, 50% resumed work/school and sustained; 58% had GAF more than 80

### Hospitalization does not Correlate with other outcome variables

parameters	Hospitalized(25)	Non-hospitalized (42)	P-value	significance
Positive symptoms	28	42	0.01	NS
Negative symptoms	15	21	0.05	NS
Disorganization	17	24	0.05	NS
Interpersonal functioning	12	30	0.01	NS
Cognition not Declined	14	20	0.05	NS
Independent living possible	12	17	0.5	NS
Aggression not present	22	30	0.05	NS
Improved QOL	16	30	0.5	NS
Family Burden	15	25	0.01	NS
Social burden	23	29	0.05	NS
No Suicidality	23	29	0.01	NS
Sustained work/school	15	17	0.01	NS

### Discussion

Poorly defined cohorts and weak study designs have hampered cross-cultural comparisons of course and outcome in schizophrenia (Harrison G., 2001.)

- Best outcome from different countries are varying between 34% to 62% By and large at ten Years the outcome is not more than 40-50%
- Outcome in schizophrenia is a multidimensional measure, therefore it needs to be performed on different parameters.
- Attempts are required to successfully integrate these measure into composite scale for easy understanding to define how different parameters can be converged to point out same measure of outcome, a challenge at present.

A global recovery rate of 62% as per CGIS at the end of ten year period of Continued treatment is comparable to other long term studies from Indian Cities ( Harrison G, et al; Br J Psychiatry. 2001 Jun;178:506-17.)

- Several international studies of long term outcome show a variable rate of remission between 33 to 50% from developed countries. ( Harrow, et al 1997; Martin Knap, 1997; westermayer & harrow, 1984
- DOSMED Study from India showed a remission rate of 62% at 5 years.
- It is also observed in literature that as time passes the remission rate declines. We reported a remission rate of 80% at 2 years outcome, elsewhere( Shrivastava A; 1999).
- A comparable rate at 2years from other studies is shown as 20-54% ( Lieberman 1993, WHO 10 country study, India).
- Thus the decline in outcome from 2 years to 10 years period from same site is with in acceptable limits
- It has been argued recently that outcome of schizophrenia in developing countries needs to be re-investigated and it is probably not as good as projected. The outcome of 62% and relapse rate of 60% in ten years duration though appears good but it can still be enhanced using several strategies.
- It needs to be investigated if there are sub-groups in schizophrenia which are poor-outcome illnesses by nature thus influencing the result as a group.
- That schizophrenia has a better prognosis in non-industrialized societies has become an axiom in international psychiatry; the evidence most often cited comes from three World Health Organization (WHO) cross-national studies. (Patel V, Cohen A, Thara R, Gureje O; Rev Bras Psiquiatr. 2006 Jun;28(2):149-52)

### Conclusion

Schizophrenia is a complex neurobehavioral disorder with limited outcome. Half of the patients improve with no concomitant difficulty while another half improves varieties of disability.

Outcome measures in schizophrenia need to be re-structured to capture real-life situation.

**Limitations**

Major limitation of the study is small sample size for better correlations & high drop out rate which indicate difficult situation in the city regarding time, transport and lack of support, besides the expense involved.

**Merits**

The study highlights as to why people suffering from schizophrenia remain marginalized even after recovery. Treatment methods need to address status of recovery.

It also highlights that prevailing outcome measures need to be re-formulated and made more sophisticated.

### Bibliography

- Meltzer HY. Eur Psychiatry 1995;10(Suppl. 1):19S-25S
- Faerden A, Nesvåg R, Marder SR. Definitions of the term 'recovered' in schizophrenia and other disorders. Psychopathology. 2008;41(5):271-8
- Haro JM, Novick D, Suarez D, Ochoa S, Roca M. Predictors of the course of illness in outpatients with schizophrenia: A prospective three year study Prog Neuropsychopharmacol Biol Psychiatry. 2008 Jul 1;32(5):1287-92
- Ng RM, Pearson V, Lam M, Law CW, Chiu CP, Chen EY. What does recovery from schizophrenia mean? Perceptions of long-term patients. Int J Soc Psychiatry. 2008 Mar;54(2):118-30.
- Haro J, Ciudad A, Alonso J, Bousoño M, Suárez D, Novick D, Gilaberte I. Remission and relapse in the outpatient treatment of patients with schizophrenia. Outcomes at 3 years. Actas Esp Psiquiatr. 2008 Jul-Aug;36(4):187-96.
- Silverstein SM, Bellack AS. A scientific agenda for the concept of recovery as it applies to schizophrenia. Clin Psychol Rev. 2008 Mar 18
- Emsley R, Chiliza B, Schoeman R. Predictors of long-term outcome in schizophrenia. Curr Opin Psychiatry. 2008 Mar;21(2):173-7.
- Reichert A, Kreiker S, Mehler-Wex C, Warnke A. The psychopathological and psychosocial outcome of early-onset schizophrenia: Preliminary data of a 13-year follow-up. Child Adolesc Psychiatry Ment Health. 2008 Feb 27;2(1):6
- Isaac M, Chand P, Murthy P. Schizophrenia outcome measures in the wider international community. Br J Psychiatry Suppl. 2007 Aug;50:s71-7.
- Lindström E, Eberhard J, Levander S. Five-year follow-up during antipsychotic treatment: efficacy, safety, functional and social outcome. Acta Psychiatr Scand Suppl. 2007;(435):5-16
- Nasrallah HA, Lasser R. Improving patient outcomes in schizophrenia: achieving remission. J Psychopharmacol. 2006 Nov;20(6 Suppl):57-61. Flyckt L, Mattsson M, Edman G, Carlsson R, Cullberg J. Predicting 5-year outcome in first-episode psychosis: construction of a prognostic rating scale. J Clin Psychiatry. 2006 Jun;67(6):916-24
- Patel V, Cohen A, Thara R, Gureje O. Is the outcome of schizophrenia really better in developing countries? Rev Bras Psiquiatr. 2006 Jun;28(2):149-52. Epub 2006 Jun 26
- Jobe TH, Harrow M. Long-term outcome of patients with schizophrenia: a review. Can J Psychiatry. 2005 Dec;50(14):892-900.
- Harrison G, Hopper K, et al . Recovery from psychotic illness: a 15- and 25-year international follow-up study. Br J Psychiatry. 2001 Jun;178:506-17
- Eaton WW, Thara R, Federman E, Tien A. Remission and relapse in schizophrenia: the Madras Longitudinal Study. J Nerv Ment Dis. 1998 Jun;186(6):357-63
- Thara R, Eaton WW. Outcome of schizophrenia: the Madras longitudinal study. Aust N Z J Psychiatry. 1996 Aug;30(4):516-22
- Thara R, Henrietta M, Joseph A, Rajkumar S, Eaton WW. Ten-year course of schizophrenia--the Madras longitudinal study. Acta Psychiatr Scand. 1994 Nov;90(5):329-36.