Early Interventions in Psychotic Disorders: Need for Regional Adaptations

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Up to about three-fourths of patients experiencing their first episode of schizophrenia or related psychotic disorders achieve clinical remission within 1 year of initiating treatment [1]. Yet, schizophrenia is one of the leading causes of disability. Long-term outcome of this condition has remained deplorably poor. It is so across several dimensions of outcome, including employment, marriage, independent living, mortality in general, and, by suicide in particular. What explains this vast gap between relatively good short-term outcome and poor long-term outcome? Finding answer to this question may help in improving the long-term outcome.

The ‘Critical Period’

In the past few decades, the concept of ‘critical period’ in the course of psychotic disorders has been influential. According to this, overall deterioration happens maximally during the beginning years of the onset of psychosis [2]. Several poor prognostic factors as well as neurobiological changes seem to accumulate during

this phase, explaining as to why this period plays a crucial role in determining long-term outcome of psychoses [3]. After this period, the change in the course of illness is relatively less pronounced. If deterioration occurring during the critical period is somehow averted, then, one might expect to improve the long-term course and outcome of schizophrenia. Conversely, not initiating comprehensive care during this period may underlie the poor long-term outcome. This thinking has led to the development of several programs aiming at providing comprehensive care early in the course of psychotic disorders.

Early Interventions

In a broad sense, early interventions refer to (a) interventions that aim to prevent the development of psychoses among persons described to have high risk to develop psychosis, (b) programs that are aimed at reducing the duration of untreated psychosis (DUP) and (c) interventions that provide comprehensive care at the first instance of treatment, with or without specific efforts to reduce DUP. Comprehensive care referred to in the latter generally includes interventions designed to address specific needs of individuals going through early phases of schizophrenia, namely, medication management, ensuring continuity of care, access to welfare benefits, case management, support towards social, educational and vocational goals and

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engaging families in the care of the individual with psychosis. These approaches have shown promise in the short run—those who received such care experienced significantly better outcomes at the end of follow up periods of up to about 5 years than those who received ‘usual care’ (for a review, refer to Srihari et al., 2012 [3]).

Such interventions are resource intensive. It is challenging to continue them indefinitely. In this background, the future of such interventions depends heavily on whether they positively influence the long-term course and outcome of psychotic disorders. In a recent systematic review, Chan et al. [4] studied the long-term outcome reported in fourteen papers on cohorts from 9 early interventions services in 7 countries and regions. Overall, the results were rather sobering. Cross-sectional assessment using standardized tools showed no significant difference between the early intervention and treatment-as-usual groups on most of the measures. Longitudinal assessments showed that on some measures, including negative symptoms, suicidal attempts, mortality, number of days of employment, number of hospitalizations, patients who received early interventions did fare better. However, these were reported in only a few studies. Moreover, the gains of early intervention tended to wear off over years, after intensive services were stopped. The modest findings of this review should be interpreted in the background of the fact that the included studies differed widely in terms of the components of interventions, demographic profiles of patients and regional, sociocultural and health-service contexts. However, the lack of distinctly encouraging results raises serious questions on the usefulness of early intervention services. It also calls for deliberations on the nature of the longitudinal course of psychotic disorders.

Regional Variations in the Course and Outcome of Psychotic Disorders

There is substantial variation in the course and outcome of schizophrenia and related psychotic disorders across different countries. An intriguing observation has been that the proportion of individuals with better outcome is substantially higher in certain low- and middle-income (LAMI) countries like India [5]. Although this finding has been observed consistently,

little is known about the reason behind the relatively better outcome in certain regions. Several hypotheses, collectively and euphemistically termed as the “sociocultural black-box”, have been proposed to explain this—these include better family support [6], lower levels of expressed emotions [7, 8], availability of informal work [6], need to work for survival in the absence of formal social security benefits [9] and psychiatric pluralism [10]. Besides such sociocultural explanations, authors have noted biological and clinical distinctiveness in the nature of psychotic disorders in certain regions—these include absence of sex difference in age of onset of schizophrenia [11], possible natural selection of good-prognosis schizophrenia [12] and relatively lower prevalence of comorbid substance use [13]. Suffice it to say that several factors that influence the course and outcome of psychotic disorders are documented to be distinctive across regions.

Magnitude of the Problem of Poor Outcome

A proportion of individuals with schizophrenia and related disorders suffer from severe disability even in regions known to have better overall outcome. These regions are highly populous, and, consequently, the sheer number of individuals who experience severe disability is enormous. Given that healthcare and welfare systems in LAMI countries are inadequate to address the needs of individuals with severe end of the spectrum of disability, it is imperative that there should be thrust on measures to limit disability. Can early intervention programmes be considered as candidates for such measures?

Need for Early Intervention Programs in LAMI Countries

As noted above, early interventions had unimpressive favourable influence on the long-term outcome of psychotic disorders. Considering this, is it worth pursuing this in LAMI countries? I believe that it would be premature to ignore this before researching it rigorously. As discussed above and amply elsewhere, the nature of psychotic disorders, including their course and outcome, is different across regions. In the background of this, it is not prudent to directly

extrapolate the findings of studies conducted in vastly different settings to LAMI countries. There is enough merit in conducting research on early interventions in LAMI countries, even though studies done elsewhere have not been highly encouraging.

The question that arises next is whether LAMI countries can bear the cost of early interventions? As pointed out above, the gist of early interventions includes support for education, work, ensuring continuity of care, providing welfare benefits, and ensuring access to meaningful social activities at the earliest instance during the treatment of persons with psychotic disorders. In certain cultures like India, family members take part in the care of almost all individuals who suffer from severe mental illnesses and they are observed to support individuals recovering from psychotic conditions with almost all aspects of early interventions discussed above [14]. It is not an exaggeration that family members are informally referred to as unpaid and untrained case managers in such cultures. Although this responsibility results in enormous burden on family members, in a majority of cases, they continue to provide such support tirelessly, without complaining. Of course, families need support and guidance from mental health professionals. It is well known that there is a severe dearth of trained mental health professionals in LAMI countries. It is here that the concept of task-shifting assumes importance. Lay counsellors can be trained to provide support for patients and families specifically in selected domains of early interventions. There are examples of support provided through such low-intensity psychosocial interventions yielding considerable benefits to patients and their families [15–17]. There is need to explore the utility of such care specifically in the domain of early interventions.

In the past few decades, there have been exciting advances in our knowledge about the nature of psychotic disorders and their treatment. However, unfortunately, they have contributed little towards improving their long-term outcome. There should be relentless efforts to explore innovative ideas of improving the condition of millions of individuals who suffer disability in the context of severe mental illnesses. Research on scalable models of early intervention in diverse regions of the Globe can be considered as the need of the hour in this context.

References

1. AlAqeel B, Margolese HC. Remission in schizophrenia: critical and systematic review. *Harv Rev Psychiatry*. 2013;20:281–97.
2. Lieberman JA, Perkins D, Belger A, Chakos M, Jarskog F, Boteva K, et al. The early stages of schizophrenia: speculations on pathogenesis, pathophysiology, and therapeutic approaches. *Biol Psychiatry*. 2001;50:884–97.
3. Srihari VH, Shah J, Keshavan MS. Is early intervention for psychosis feasible and effective? *Psychiatr Clin North Am*. 2012;35:613–31.
4. Chan SK, Chan HY, Devlin J, Bastiampillai T, Mohan T, Hui CL, et al. A systematic review of long-term outcomes of patients with psychosis who received early intervention services. *Int Rev Psychiatry*. 2019;31:425–40.
5. Jablensky A, Sartorius N. What did the WHO studies really find? *Schizophr Bull*. 2008;34:253–5.
6. Lauriello J, Bustillo JR, Keith SJ. Schizophrenia: scope of the problem. In: Sadock BJ, Sadock VA, editors. *Kaplan & Sadock's comprehensive textbook of psychiatry*. 8th ed. Baltimore: Lippincott Williams & Wilkins; 2005. p. 1346–54.
7. Cohen A, Patel V, Thara R, Gureje O. Questioning an axiom: better prognosis for schizophrenia in the developing world? *Schizophr Bull*. 2008;34:229–44.
8. Wig NN, Menon DK, Bedi H, Leff J, Kuipers L, Ghosh A, et al. Distribution of expressed emotion components among relatives of schizophrenic patients in Aarhus and Chandigarh: II. *Br J Psychiatry*. 1987;151:160–5.
9. Rangaswamy T. Twenty-five years of schizophrenia: the Madras longitudinal study. *Indian J Psychiatry*. 2012;54:134.
10. Halliburton M. Finding a fit: psychiatric pluralism in South India and its implications for WHO studies of mental disorder. *Transcult Psychiatry*. 2004;41:80–98.
11. Venkatesh BK, Thirthalli J, Naveen MN, Kishorekumar KV, Arunachala U, Venkatasubramanian G, et al. Sex difference in age of onset of schizophrenia: findings from a community-based study in India. *World Psychiatry*. 2008;7:173–6.
12. Thirthalli J, Jain S. Better outcome of schizophrenia in India: a natural selection against severe forms? *Schizophr Bull*. 2009;35:655–7.
13. Kumar CN, Thirthalli J, Suresha KK, Arunachala U, Gangadhar BN. Alcohol use disorders in patients with schizophrenia: comparative study with general population controls. *Addict Behav*. 2015;45:22–5.
14. Thara R, Padmavati R, Srinivasan TN. Focus on psychiatry in India. *Br J Psychiatry*. 2004;184:366–73.
15. Chatterjee S, Naik S, John S, Dabholkar H, Balaji M, Koschorke M, et al. Effectiveness of a community-based intervention for people with schizophrenia and their caregivers in India (COPSI): a randomised controlled trial. *Lancet*. 2014;383:1385–94.
16. Suresh KK, Kumar CN, Thirthalli J, Bijjal S, Venkatesh BK, Arunachala U, et al. Work functioning of schizophrenia patients in a rural south Indian community: status at 4-year follow-up. *Soc Psychiatry Psychiatr Epidemiol*. 2012;47:1865–71.

17. Kumar CN, Thirthalli J, Suresha KK, Venkatesh BK, Arunachala U, Gangadhar BN. Antipsychotic treatment, psychoeducation & regular follow up as a public health strategy for schizophrenia: results from a prospective study. *Indian J Med Res.* 2017;146:34–41.

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