Early Intervention in First-Episode Psychosis

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Abstract.

There are strong arguments for early intervention in psychosis, including personal, social and economic benefits. The principles of such treatment incorporate the least restrictive approach that is consistent with effective treatment, using the minimum effective dose of antipsychotic medication, retaining social role, involving the family and avoiding relapse.

Keywords: early intervention, psychosis, treatment.

Introduction.

Early intervention for psychosis services have been a major area of development in Community Mental Health in recent years. The WHO Declaration for Mental Health in Europe (1) recommends that specific care should be given to persons who develop mental illness for the first time. A set of standards developed for Community Mental Health in Europe also recommends that specific services be set up for young patients who become psychotic for the first time (2).

Early Intervention Services in the UK follow patients who have had a first psychotic episode for three years. They are targeted at persons between the ages of 15 to 35 years, and treat all forms of psychotic illness, reflecting the fact that there is marked diagnostic instability in the first few months of psychotic illness.

Why intervene early in psychosis? (3)

• There is usually a long delay between the onset of symptoms of psychosis and the start of effective treatment.
• If persons with psychosis remain untreated, there is greater probability of harm, be it physical, social or legal.
• Social and personal disability rapidly develops within the first few years of psychosis.
• Early treatment with antipsychotic drugs does improve the prognosis of a psychotic illness.
• If treatment of psychosis is delayed, substantially higher health care costs for the first three years after treatment is initiated will occur.
• Treatment resistant symptoms begin to develop within the first three years, or critical period.
• The tendency to repeated hospital admissions starts within the first three years, or critical period.

Why treat patients with a first psychotic episode in a specialised manner? (3)

• It is probable that patients who have experienced a first episode of psychosis will recover well in the short term.
• Relapse during the early course of psychosis leads to an increased likelihood of further relapses and chronic illness.
• If a decline in function occurs in a psychotic illness, it will occur early in the illness, or even in the prodromal phase, before clear psychotic symptoms are manifested. Hence, the first three years of psychosis are a biologically ‘critical period’.
• The first few years of psychosis are also a ‘critical period’ from a psychosocial point of view.

Guiding Principles for services (3)

• An early psychosis service will have a youth and client centred focus.
• If a patient fails to engage, his case should not be closed.
• There must be an emphasis on maintaining the client’s social roles.
• Psychiatric treatment will be delivered in the least restrictive setting, as long as treatment can be
delivered effectively and safely.
• Treatment should be delivered in such a way as to minimise stigma.
• The dose of neuroleptics should be the lowest dose which will effectively treat the symptoms.
• It is accepted that in the early phases of a psychotic illness, a definitive diagnosis may be impossible
to make because of the day to day variability of symptoms.
• The family should be fully involved in every aspect of patient care.

Clinical Guidelines (3)

• A strategy for early detection and assessment of frank psychosis is an essential component of early
intervention.
• Following referral of the case, a key worker should be appointed soon, so as to engage with the
client and family / friends throughout the first three years (the critical period), using an assertive case
management model.
• An assessment plan and an assessment of needs, which is both comprehensive and collaborative,
and driven by the requirements and preferences of the client and their relatives and friends should be
drawn up.
• The management of acute psychosis will include low dose, preferably atypical antipsychotics as well
as the use of cognitive therapy.
• Family and friends should be involved in the engagement, assessment, treatment and recovery
process.
• A strategy for relapse prevention and avoidance of treatment resistance should be implemented.
• A strategy to facilitate the client’s return to work and valued occupation should be used throughout
the critical period.
• It is necessary that the basic needs of daily living, housing, money and practical support –are met.
• Assessment and treatment for co-morbidity [alcohol use and illicit drug use] must be undertaken in
conjunction with similar processes for psychosis.
• A local strategy to promote a positive image for people with psychosis should be adopted.

Whom do we treat in EI Services? (3)

The bulk of the evidence is regarding schizophrenia; however, in first psychotic episodes, there is often
diagnostic instability.

Often the diagnosis may be unclear; there is evidence that other forms of psychosis, including
bipolar affective disorder, may have as long a duration of untreated psychosis as with schizophrenia.
Hence, we treat the whole of the ‘schizophrenia spectrum’. There is a similar poly-genic basis for both
schizophrenia and manic depressive psychosis (4).

Assessment

In order adequately to assess patients who present as psychotic for the first time, it is necessary
to understand that many young persons with psychosis may not wish to disclose that they are
experiencing psychotic symptoms. Patients might be very withdrawn and reclusive because of their
illness. They might intentionally wish to ‘cover up’ their symptoms, or they may be in denial. Hence it
is often quite a difficult task to assess patients. The assessment needs to be made in an environment
in which the patient feels comfortable. Open questions should be used initially, and more probing
questions need to be asked subsequently. It is important to appropriately evaluate collateral
information from parents, friends, and other interested parties.

Often, several sessions are needed before the full picture becomes clear. It is useful sometimes to
‘map out’ symptoms over months, and also to use appropriate rating scales, such as the Positive and
Negative Syndrome Scale (PANSS) in order to evaluate the intensity of mental health symptoms. All
appropriate clinical investigations should also be carried out.
Management

The care co-ordinator will also carry out a ‘needs assessment’ in order to be able to formalise the care plan. The aim of this is to ensure that each patient has the opportunity to achieve as full a recovery as possible.

Assertive Case Management.

Assertive case management is considered the most appropriate case management style for an early intervention service. This is because the adherence of the individual to a treatment plan is facilitated if his/her initial contact with mental health services is a positive one, thus minimising unnecessary delay in the initiation of adequate treatment and possibly avoiding admission to hospital. In order to achieve this, the case manager will work in a youth centred way, and will be prepared to meet with the patient in locations which the patient will feel happy with. There is a firm commitment to do all that is necessary to enable the patient to return to mainstream work and or education. Working in this way will improve outcome. (5-7).

Pharmacotherapy and Psychological Treatment

In order to maximise benefits, improve compliance, and reduce side effects, the use of low dose medication (in the UK we are now clear that this means the lowest EFFECTIVE dose of atypical antipsychotics) is advocated, in conjunction with psychological therapies. Previously, it was considered good policy to use very low dosage of typical antipsychotic medication, such as haloperidol, in order to attempt to avoid extra-pyramidal adverse effects. Today, however, it has been demonstrated that the therapeutic window for typical medications is too narrow for such a medication strategy to be routinely effective, so this policy has been superseded by the use of atypical antipsychotic medications (8-10). The aim is to ensure that patients who have had a psychotic episode should continue on preventive antipsychotic medication for a period of three years, this being the period of time in which the patients remain within the early intervention service. Further treatment will be decided according to the circumstances of the individual case. After a study of the literature, our own service has recommended that possible first line medication could be risperidone 4-6mg, quetiapine 600mg, olanzapine 10-15mg or aripiprazole 10-20mg. We recommend, that first one atypical antipsychotic should be administered for six weeks and then changing to a different one for the next six weeks. If neither of these two drugs is effective, then resistant positive symptoms should be treated by clozapine, at an appropriate dose. In resistant cases it is also important to establish that cannabis is not being used by the patient concurrently. Amisulpride is used in young patients, because the product licence of this drug starts at age 15 which is lower than that for the other antipsychotics (8-10). Patients with mania are treated with olanzapine or quetiapine, as well as a mood stabiliser, usually semi-sodium valproate.

Psychological interventions, including cognitive behaviour therapy (CBT) and family interventions, are treatments which can be used to reduce stress, in combination with appropriate medication, in order to intervene adequately with both elements of the stress-vulnerability model. There is good evidence that CBT can reduce the distress caused by psychotic symptoms such as hallucinations and delusions but this is mostly from trials of the intervention with chronic patients. Further evidence is now being produced regarding the use of CBT in first psychotic episodes (11,12). Much CBT work in early intervention is in fact aimed at treating depression and anxiety symptoms. Another form of CBT is ‘Compliance Therapy’, a motivational interviewing technique used to enable patients to adhere to their medication (13). CBT is also used to treat depressive symptoms which occur as the patient recovers from psychosis. About 30% of patients with psychosis suffer post-psychotic depression. Some become so distressed that they may commit suicide. The patients who are most at risk are the ‘integrators’; who are most likely to be severely affected by low self-esteem and a deep sense of personal loss as a result of their illness. Patients who ‘seal over’ their psychotic experience are unlikely to suffer from depression.

Family interventions are now well established as a means of reducing High Expressed Emotion (EE),
which is known to cause psychotic relapse. In a first episode psychosis, it is often the case that High EE has not had time to become established; however, the family is markedly distressed. The intervention therefore needs to be modified so as to be appropriate for the needs of the families who are being helped (14). Group interventions for families, patients, and psycho-education groups are also effective in supporting patients and their families (15).

All patients and their families should be educated to identify early signs of relapse, and these patients will then work out a relapse prevention plan with their care co-ordinator.

Caring for the Carers

Improving the interaction between people with psychotic illness and their families must be recognised. Hence addressing the needs of carers is a very important part of the treatment process.

Outcomes

It is becoming clear from reported results that there are important advantages in developing dedicated teams to deal with early psychosis, and that this treatment is more effective than treatment as usual in ordinary Community Mental Health Teams.

There have been a number of outcome studies, many of which are only one or two year outcome studies. The studies which have reported one year outcomes are: the Swedish ‘Parachute Project’ (16) the Leo Study from Lambeth, London (17,18), the OPUS Study from Denmark (19-22), and the Danish National Schizophrenia Study (23). The Swedish Parachute Project (16) reported that it was possible successfully to treat first episode psychosis patients with fewer inpatient hospital days and less neuroleptic medication (prescription of neuroleptic medication was lower than is usually recommended), when combined with intensive psychosocial treatment and support. This was also accompanied by high patient satisfaction in the trial group. The OPUS study, from Denmark, reported reduced family burden of illness in the early intervention group (24), patients had significantly fewer psychotic and negative symptoms, less comorbid substance abuse, better adherence to treatment and more satisfaction with treatment at one year and two year follow ups (19-22). The Danish National Schizophrenia Project reported a non-significant tendency towards a greater improvement in social functioning in the integrated treatment and the supportive psychodynamic groups, compared with treatment as usual. If allowance was made for the confounding effects of drug and alcohol abuse, then significance was reached in some measures (23). The Leo study from the UK has shown that the early intervention group were less likely to relapse, were re-admitted fewer times, and were less likely to drop out of the study than those receiving CMHT care. However, when adjustment was made for sex, previous psychotic episode and ethnicity, the difference in relapse rate ceased to be significant (17).

At 18 months, outcomes from the participants receiving care from the early intervention team were significantly better for aspects of social and vocational functioning, satisfaction, quality of life and medication adherence. Symptom improvement did not differ significantly between the groups (18). A study in Luton reported on sixty-two patients who had been treated for three years in an Early Intervention service [EI], and compared their outcomes to sixty-two patients who had been followed up after a first psychotic episode in standard community mental health teams [CMHT] (25). There were many differences in outcome measures at the end of three years between the two groups. The EI patients were more likely to be taking medication at the end of three years. They were more compliant with medication. They were more likely to be prescribed atypical medication. The EI patients were more likely to have returned to work or education. The EI patients were more likely to remain living with their families. They were less likely to suffer depression to the extent of requiring antidepressants. They committed less suicide attempts. The patients in the EI service were also less likely to suffer relapse and re-hospitalisation, and were less likely to have involuntary admission to hospital. They had systematic relapse prevention plans based on the identification of early warning signs of relapse. They and their families receive more psycho-education. These facts showed that the EI patients were at the end of three years better able to manage their illness/vulnerability on their own than the CMHT patients. More patients in the EI group stopped using illicit drugs than in the CMHT group. All the above changes were statistically significant except for the total improvement in employment
status and education status, which however approached significance. These results do suggest that an ad-hoc early intervention team is more effective than standard community mental health team in treating psychotic illness.

In general, it does then appear that assertive early intervention during the critical period offers better results than treatment as usual.

**GP comment**

**What have I learned from this paper?**

1. Early intervention in psychosis can be of major benefit to the patient and family by avoiding serious deterioration, retaining social role and keeping the period of psychological distress to a minimum.  
2. Early intervention can also reduce stigma.  
3. Treatment should be in the least restrictive setting and with the minimum dose of antipsychotic medication that is effective; the family should be involved if possible.  
4. In practice this would mean that I would need to seek advice from specialist services promptly and ensure that the service provides early effective intervention according to these established principles

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**References.**

1. WHO declaration on Mental Health in Europe 2004.
3. IRIS Guidelines North Birmingham Mental Health Trust p19; 1999


14. Leff J et al A controlled trial of social intervention in families of schizophrenic patients; *British Journal of Psychiatry* 1982; 141;121-134.


