Early intervention – the key to successful psychosis treatment?

An early intervention in psychosis service has significantly reduced the length of time patients with psychotic illnesses remain untreated

**EARLY INTERVENTION** measures have long been used for the management of conditions such as cancer, heart disease and stroke, leading to vastly improved outcomes. In more recent times, the field of psychiatry has started to implement this early intervention model with interesting results, particularly in the management of psychosis.

Psychosis features in conditions that affect 3% of the population, and approximately 1,000 people develop psychosis in Ireland each year. Psychotic illnesses include: schizophrenia, bipolar affective disorder, severe depression and drug-induced psychosis. These can be lifelong illnesses, with onset in late teens or 20s, and sometimes result in devastating impact on patients and their families. Because of the young age of onset, patients with psychosis often suffer for many years with these conditions, frequently experiencing a relapsing remitting course to their illness, with consequent effects on quality of life, occupational functioning, and self-harm behaviours. Recent research suggests that early intervention has the potential to improve outcomes for patients with psychosis, and GPs can play an important role in ensuring early treatment.

**Early phases of psychosis**

Duration of untreated psychosis (DUP) is the length of time from onset of psychosis to treatment of psychotic symptoms. Similar to long delays prior to stroke and acute coronary syndromes, long DUP also leads to poorer outcomes. As psychotic patients will often first present to their GP, either through self-presentation or accompanied by a family relative, GPs are seen as playing a crucial role in identifying suspected psychosis and ensuring prompt specialist referral.

In a national Irish survey, 77% of GPs indicated that they see three or more suspected cases of psychosis per year. As reported by GPs, the most common symptom profile among these patients includes bizarre behaviour, social withdrawal, delusions and hallucinations. While florid psychotic symptoms may sometimes make diagnosis more straightforward, presentations such as social withdrawal and decline in functioning can often be more subtle, presenting diagnostic challenges for GPs. Less common presentations include patients with anxiety, depression, substance misuse, and suicidal thinking.

Early intervention services have mushroomed in the last decade, with over 200 developed across the globe. Pioneering services developed in Melbourne, Australia, form part of a specialist youth mental health service, offering easy access to specialist care, including intensive home-based treatments and increased efforts at engaging vulnerable patients. The UK, Canada, Singapore and Scandinavia have also made huge advances in providing specialised care for psychosis, including clinics aimed at the early identification, evaluation, and treatment of those considered at high risk for developing psychosis. Provision of specialised adult education programmes have also been developed, and intensive early detection programmes in Scandinavia involving education campaigns and low threshold early detection teams have shown that this is an effective method for reducing DUP.

**DETECT**

The Dublin and East Treatment and Early Care Team (DETECT) is an early intervention in psychosis service, funded by the HSE, operating in the Dublin mid-Leinster region. The service aims to reduce the length of time for which patients suffering with psychotic illnesses remain untreated. DETECT works collaboratively with mental health services and GPs in the area, also liaising with other healthcare workers and key professionals in the community, such as teachers and gardaí. Upon receipt of referral for suspected psychosis, DETECT provides a rapid assessment in the community, and offers a specialised treatment package for patients suffering from psychosis. This multidisciplinary package includes occupational therapy and newer evidence-based treatments, such as cognitive behavioural therapy (CBT), and a family education group.

Since its inception, service evaluation at DETECT has demonstrated the positive benefits of the service. Median DUP has reduced from six months to two months in the catchment area, in large part due to a successful education campaign of GPs in the region, much of which was delivered as part of Continuing Medical Education. There has been a reduction in the severity of symptomatology at presentation, including reduction in positive symptoms, negative symptoms, and better global assessment of functioning. Some 40% of those assessed are now seen as outpatients (previously 16%), and just one-fifth of those assessed are admitted to inpatient units in the following 18 months.

The benefits of early intervention at DETECT are consis-
tent with the international literature in this area. Numerous research studies investigating DUP have demonstrated one-to-two year outcome improvements, with shorter DUP on a number of measures, including positive symptoms, negative symptoms, functioning, number of relapses, number of hospitalisations, quality of life and suicidality. Meta-analyses have also confirmed better one-to-two year outcomes associated with shorter DUP. Due to lack of long-term outcome research available, firm conclusions cannot as yet be made in relation to the long-term benefits of shorter DUP in psychosis. Early studies with eight-to-15 year follow up have demonstrated the benefit of shorter DUP on some long-term outcome measures, including positive and negative symptoms, functioning, likelihood of remission status and quality of life.

Not only has shorter DUP been shown to improve outcomes in psychosis, but better outcomes have also been demonstrated following the introduction of early intervention services, with fewer admissions, fewer involuntary admissions, and fewer emergency department visits found in recent studies. Economic analyses are now also suggesting that early intervention services are cost effective, with better service provision, at lower cost.

Why does DUP improve outcome?

Reasons for improved outcomes with reduced duration of untreated psychosis aren’t fully clear. The ‘toxic’ effect theory suggests that psychosis may lead to poorer outcomes through some as yet unknown neurological, psychological or social mechanism. Others have hypothesised that preoccupation with psychotic symptoms during psychosis could potentially decrease use of some neural circuits, leading to atrophy or reduced connectivity in these circuits, creating deficits such as negative symptoms in the long-term. Research is ongoing in efforts to understand this phenomenon, which could lead to better understanding of psychotic illnesses.

Recent advances in psychosis management have shown that early intervention models, used in numerous other medical conditions, can be used for improving outcomes in psychosis. Given the severity and chronic nature of psychotic illnesses, input at an early phase has the potential to reap huge benefits for patients later on. GPs can play a vital role in the initial treatment of these patients, with early identification leading to reduced treatment delays. With ongoing improvements and further development of services, the prognosis for psychotic illnesses continues to improve.

John Lyne is a clinical fellow in DETECT Early