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EDITORIAL

Should early psychosis intervention be the focus for mental health services?†

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†See pp. 401–407 and 408–416, this issue.

SUMMARY

This issue of *Advances* carries two articles from Melbourne, Australia, outlining the rationale for, and implementation of, early psychosis services. Their publication provides an opportunity to address some of the more contentious issues relating to the early psychosis intervention movement.

DECLARATION OF INTEREST

None.

Space limitations preclude a critique here of all of the issues regarding early intervention services. I will focus on the more contentious. Readers wishing for a broader review are referred to Bosanac *et al* (2010) and Pelosi & Birchwood (2003).

Are early intervention services associated with enhanced longer-term outcomes?

As Murphy & Brewer point out (Murphy 2011a,b, this issue), a number of studies have shown that early intervention programmes for psychosis are liked by participants and their families and have beneficial effects while they are being delivered. But short-term effects are not of prime importance: it is well known that high-fidelity multidisciplinary teams can effect good outcomes for people with schizophrenia, whatever the stage of illness. What is critical to the early intervention field is whether they fulfil their 'promise' that early treatment can ameliorate longer-term outcomes.

Naturalistic studies

A number of investigators have attempted to measure whether there are such longer-term benefits. For example, the US study of Robinson *et al* (1995) reported cumulative relapse rates for 104 people with early psychosis to be 82% for a first episode and 78% for a second episode, over 5 years. Closer to home, the EPPIC group in Melbourne have performed a 7-year follow-up of 651 (of an original 723) consecutive early-psychosis patients (Henry 2010). Only 57.5% had schizophrenia, and outcomes for the schizophrenia group were conflated with those for patients with schizophreniform psychosis, a disorder with intrinsically better outcomes. In any event, outcomes were overall very poor, with only 14.9% showing full symptomatic and social/vocational remission. And from Sweden, Bodén *et al* (2010) reported on a naturalistic study of 144 first-episode patients. They found that those who had received a modified assertive community treatment (mACT) intervention had no better 5-year outcomes across multiple outcome domains than those who had not received it: indeed, the mACT group showed marginally worse positive symptom ratings (OR = 3.21; 95% CI 0.97–10.63). The reliance on historical control groups (i.e. a cohort from previous years) in the foregoing studies limits the conclusions that can be drawn, but the results do underscore the fact that the chances of relapse even with specialised early psychosis services are high, as is the risk of poor longitudinal outcomes.

Randomised controlled trials

The gold standard by which to assess the efficacy of interventions is the randomised controlled trial. Of course, these are very difficult and expensive undertakings, particularly in complex interventions such as early psychosis. Thus, three such studies deserve special mention. All essentially compared an early psychosis specialist programme with 'usual care'; they included a broad range of psychotic illnesses and used multifaceted interventions. The Lambeth Early Onset (LEO) study in London (Craig 2004) found short-term (12–18 months) benefits from the specialist intervention in terms of hospital admission rates and vocational and social functioning (Garety 2006). However, at 5-year follow-up, benefits in terms of admissions had dissipated; indeed, there was a rapid 'catch-up' shortly after the specialist programme ended (Gafoor 2010). The OPUS study in Denmark similarly found that 2-year benefits, including improved psychotic symptoms and reduced substance use, were not sustained at 5 years (Bertlesen 2008). Finally, the Dutch study of Linszen *et al* (1998) also reported loss of early gains at longer-term follow-up.

Propping up the paradigm

Defenders of the early intervention paradigm (e.g. McGorry 2010; Singh 2010) assert that the lack of longer-term benefits from early intervention compels the field to deliver it for longer, a suggestion supported by Murphy & Brewer (2011a). But there is no evidence that this would generate the desired dividends, and also it skirts the main promise of early intervention, namely that it would ameliorate longer-term trajectories. All that these studies have shown is that good clinical care is good for patients while it is being delivered. We know this! Indeed, the intensive case management literature (e.g. Preston 2000) has shown that clinical and psychosocial benefits and reduced hospital admission rates can be achieved even in the most disabled, chronically ill patients. It is encouraging that Murphy & Brewer (2011a) acknowledge that there are patients in early psychosis services who require ongoing intense intervention, and are beginning specifically to target these individuals.

The DUP

Murphy & Brewer (2011a) also touch on another approach in the early intervention field, namely targeting the so-called 'duration of untreated psychosis' or DUP. This is the period of active psychotic symptoms antedating initial treatment and all too often it is associated with subsequent schizophrenia. Indeed, in many jurisdictions average DUP can be months to years. Longer DUP is associated with worse outcome in schizophrenia, but this finding is confounded by the fact that it may be a characteristic of a severe form of schizophrenia with an inherently poor outcome. Thus, there is a significant conceptual and therapeutic challenge in whether DUP can actually be reduced, and whether reducing it improves long-term outcomes.

This is a very difficult area to study, with the best experimental data coming from the Norwegian TIPS study (Friis 2005), which added a concerted early detection programme in two of four health sectors. In the regions in which the programme was put in place, DUP was indeed reduced (median 4 weeks *v*. 16 weeks in the control sectors). It has been reported that the 5-year outcomes were better for cohorts in the areas in which reduced DUP was effected (Larsen 2011), but gains were marginal and arguably not of clinical relevance: for example, there was a 0.4 point between-group difference on the Positive and Negative Syndrome Scale (PANSS) positive symptoms subscale at 5 years (not significant) and a 1.2 point difference on the negative symptoms subscale (also not significant). There was a highly significant difference on the cognitive subscale of the PANSS (1.2 points; $P<0.0001$), but this subscale is not the gold standard for assessment of cognition and the clinical importance of this finding is unclear. It should also be stressed that TIPS was not a test of early intervention programmes as such (as all patients ostensibly had the same intervention), but specifically of whether reduction in DUP is achievable and beneficial. Actually, the results might well be attributable simply to the cohort in the reduced DUP group having been recruited at a stage of illness in which they showed fewer symptoms and this difference between the groups being sustained at 5-year follow-up. Also, there was significant bias in terms of ascertainment and attrition, leaving the generalisability and robustness of the results tenuous and requiring replication. Furthermore, other intervention studies have not consistently shown effects of DUP on outcomes (see Norman 2001).

Why have stand-alone services?

Murphy & Brewer (2011a) seem wedded to the idea of youth-specific services, although I am aware of no studies that support these as of themselves more effective than services that accept patients of any age. The fact is that many patients have an onset of psychosis after their mid-20s (Castle 1998) and these people also have needs related to their phase of development, such as relationships, children, jobs and so forth. How would services look if every subgroup (young, not so young, middle aged, elderly; male, female; married, unmarried; higher socioeconomic, lower socioeconomic; higher education, lower education; and so on) had its own service?

Many practitioners in early psychosis claim that stand-alone services are critical to maintain the integrity of what they do, and that joining with or being embedded in mainstream services would perturb their fidelity. Indeed, a leading group of experts in the field (McGorry 2010) have labelled generic services 'pessimistic' and implied that they are responsible for the fact that patients do not do as well once the intensive intervention ceases.

But no formal comparison of stand-alone and integrated early psychosis services has, to my knowledge, been performed. Furthermore, it has been convincingly shown that a high-fidelity early psychosis service can be delivered within mainstream mental health services (Petrakis 2010). There are also significant problems associated with stand-alone services, including silo effects (lack of communication and common goals between services), the potential de-skilling of the generalised workforce in the area of early psychosis and the difficulty of transitions between services for patients, their families and clinicians. Friis (2010) has raised another important point, notably the 'loss' experienced by the patient on transition from first-episode psychosis services: surely the

response to that is to create services that look after people for as long as such care is required, which is what happens in generic services.

Who is, and who should be, 'treated'?

Issues that I do not address in detail here include interventions for so-called 'ultra-high-risk' (UHR) patients. Murphy & Brewer (2011a) fail to distinguish between individuals in the prodrome and individuals at ultra-high risk of psychosis: this is a key conceptual problem for the field. They also fail to report that the rate of conversion to psychosis in recent studies of high-risk populations is very low and that work from EPPIC itself (Yung 2011) showed 6-month conversion rates of between 5.1% and 7.0%. The EPPIC study also failed to show any difference in primary or secondary outcomes between cognitive therapy plus risperidone, cognitive therapy plus placebo, supportive therapy and simply monitoring. Thus, the UHR approach, with its inherent dangers of labelling, medicalisation and exposure to what might be harmful treatments, is certainly not, to my mind, something that should be considered part of services: it is still very experimental and the outcomes are increasingly sobering rather than compelling. Readers are referred to the blog of the esteemed US researcher Allen Frances for more about this (Frances 2011).

Finally, Murphy & Brewer (2011a) skirt the issue of precisely who is being treated in the early psychosis services. While the large World Health Organization schizophrenia surveys showed fairly consistent rates of schizophrenia across the globe (around 7–14 per 100 000 population per year) (Jablensky 1992), reports from the UK at least show rates of early psychosis around 50 per 100 000 per year, and my estimates of the EPPIC rates are around 100 per 100 000 per year. This raises two immediate questions. First, who exactly is being treated, and do they all need treatment? And second, how much of the health budget will be needed to deliver care to this ever-expanding group? This second issue opens a can of worms regarding funding: although EPPIC claims to save money (Mihalopoulos 2009), we have seen no dividends returned to mainstream mental health services from such savings, and the fact that so much money is going into such services results in other parts of the health system being depleted: certainly this is occurring in Australia, with restrictions on new psychiatric medications and on access to psychologist services. We need a much better informed and equitable response to the mental health problems of our communities, not one built on faith rather than facts (Bosanac 2010), nor one that is simply a political response to intense lobbying by a few 'true believers'.

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