Early intervention in psychosis: still the ‘best buy’?

David J. Castle/Swaran P. Singh

Summary
High-quality services for people with psychosis are essential. However, in this debate David Castle questions whether separate early intervention services are the best option and argues instead for an integrated approach. Swaran Singh responds, robustly defending the value of early intervention services.

Declaration of interest
D.J.C.: none; S.P.S. is Commissioner for the Equality and Human Rights Commission, UK. He is Chair of the Guidance Development Group for Transition from Paediatric to Adult Care, Social Care Institute for Excellence, UK. In the past 3 years he has received lecture honoraria and advisory board consultancy fees from pharmaceutical companies including Otsuka, Lundbeck, Roche and Sunovion. He is Trustee of the charity NiDUS-UK. He is member of the Research and Evaluation Board Advisory Committee, HEADSPACE Foundation, Australia.

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In debate

It is salient that, despite some (arguable) pharmacological advances over the decades since chlorpromazine and clozapine came to market, there has been no ‘quantum leap’ in therapeutics for schizophrenia and related disorders. The recent large-scale Australian Study of High Impact Psychoses (SHIP) paints a rather bleak picture of the lives of Australians with psychotic disorders including schizophrenia and related disorders, bipolar disorder with psychosis and depression with psychosis.1,2 Hence, many of the 1825 participants continued to experience psychiatric symptoms and were socially isolated and unemployed and experiencing an illness course characterised by relapses and admissions to hospital. Given this somewhat dismal picture, any prospect of altering this bleak picture of the lives of Australians with psychotic disorders has to be welcome. The notion that intervening early in the course of the illness is likely to be more effective than intervening later, makes logical sense. Indeed, it has so much appeal that ‘early intervention’ has become de rigueur across the world and substantial investment has been made into services.

(a) Why have the promised/expected enhanced outcomes been so elusive? The fact is that studies that have tried to demonstrate improved outcomes for early intervention for psychosis services have largely failed to show any enduring effects. Most do show some benefit while the service is being delivered but these gains tend largely to revert once the ‘specialist’ service is withdrawn.6,7 Bodén et al8 failed to show any differential benefit from assertive community treatment modified for early psychosis. And the outcomes from the world-leading Early Psychosis Prevention and Intervention Centre (EPPIC) service in Melbourne, Australia, showed that at 7 years follow-up only 14.9% of patients with early psychosis (including schizoaffective psychosis) had remitted fully in symptomatic and psychosocial domains.9

(b) How long is long enough? One of the defences of the early psychosis paradigm, in light of these un-compelling outcomes, has been that the usual 2–3 year treatment duration for early psychosis services is insufficient effectively to have an impact on the longitudinal trajectory of the illness. Norman et al10 thus reported that if an initial 2-year high-fidelity intervention was followed by a lower-fidelity but still specialist intervention, outcomes were more sustained. But to me this simply makes the point that good care is good for you and needs to be delivered for as long as is required. I fully support excellent care being delivered at the earliest opportunity, but I am not convinced that there is a critical period. Indeed, most people’s illness course will largely be defined by the illness itself: and there are almost certainly different subtypes of illness within the psychosis grouping, with differential outcomes.11

(c) How early is early? There is a major problem in determining how early one should intervene with people with psychotic disorders. The fact is that by far the majority of risk is determined by genetic variables, albeit these are complex and a culmination of a number of genes of relatively small effect, interacting with environmental factors. The trajectory of development for people who later develop schizophrenia has been convincingly shown to deviate from those who do not later develop such an illness,12 but these are aggregate findings and are far too non-specific to afford targeted intervention. The attempt by some services to try to ‘predict’ who will ‘convert’ to psychosis, mostly using attenuated symptoms (so-called ultra high-risk approach), has lacked predictive validity in more recent methodologically robust studies.13 Furthermore, there is little to guide clinicians as to what to do in terms of intervention for so-called ultra high-risk individuals: antipsychotic medication trials have largely failed and in any event carry metabolic and other risks; psychological interventions have also been underwhelming in recent larger-scale studies;14 and a single positive study of omega-3-fatty acids has, as far as I am aware, not been replicated.15 This leaves the field to focus largely on a reduction in the so-called ‘duration of untreated psychosis’ (DUP). There is clear evidence that a longer DUP is associated with worse outcomes, but much of this is a consequence of a longer insidious evolution of illness being more likely to be associated with a poorer outcome form of disorder,16 and compelling evidence that a reduction in DUP can actually ameliorate the longer-term decline is lacking. Furthermore, simply introducing early psychosis services is not usually
associated with a robust reduction in DUP.\textsuperscript{17} I am aware of only one study that specifically sought to reduce DUP. This is the early Treatment and Intervention in Psychosis (TIPS) study in Norway that compared outcomes for patients with first-episode psychosis in intervention catchments with those from control catchments that engaged their patients slightly later but who subsequently offered much the same service. DUP was reduced by some weeks: the median was 4 weeks (range 0–416) for those in the early detection area vs. 13 weeks (0–520) in the control area. Ten-year outcomes for individuals in the intervention catchments were somewhat superior to the controls.\textsuperscript{18} Yet the results could be, in part at least, a cohort effect, with differences in the groups being evident at baseline and merely being sustained but not built on. Also, the size of the effects are very modest, for example 52.5\% of the early-detection group being remitted vs. 47.9\% of controls (odds ratio (OR) = 1.20, 95\% CI 0.66–2.19).

(d) What do these services actually do that is so special? Some commentators\textsuperscript{19} have asked exactly what magic ingredients there are in the early psychosis services. Indeed, early psychosis service guidelines read simply as an exposition of good clinical practice. We know and have known for a long time that focused high-fidelity clinical services are beneficial for patients. For example, assertive community treatment has good randomised-controlled trial evidence for efficacy,\textsuperscript{20} and these gains can be seen even for those patients who are most disabled quite far along their illness course. Back to my mantra: good services are good for people!

(e) How are they best integrated with extant services? One of the real problems is how to establish such services in a way that they do not drag resources from other need areas and how they ensure continuum of care for the patient. These services have been described as the ‘jewel in the crown’ of UK mental health services, but as I have suggested elsewhere, the jewel will fall out if the crown itself is eroding.\textsuperscript{21} Across the globe we have seen investment in early psychosis services, which is welcome of course, but the stark fact is that mental health is universally underfunded relative to other areas of health. We need to be advocating for better overall mental health funding. The problem currently is that governments can point to investment in early psychosis services and say they are investing in mental health; yet these services are by their very nature time-limited and not available in the longer term. Also, stand-alone services lead to silos, with difficult transitions for patients and families\textsuperscript{22} and also staff in both early psychosis services and in ‘mainstream’ services being deprived of, and becoming deskilised in, the provision of clinical care to those not within their particular jurisdiction. Stand-alone services have been defended on the grounds that they will lose fidelity if merged with other services, yet it has been shown that one can maintain fidelity in an integrated model.\textsuperscript{23}

Finally, it is important to consider whether there is any potential harm associated with introducing early intervention for psychosis services. The most obvious potential harm is to other components of the mental health services, as outlined above. But there is also potential harm from individuals being labelled as having ‘psychosis’ or even being ‘at risk’.Regrettably, stigma regarding mental illness broadly, and psychotic disorders in particular, is still alive and well, and the experience thereof is isolating and distressing for individuals. This needs to be seen in light of psychosis proneness (i.e. the potential to manifest psychosis-like symptoms) actually being part of the human condition, probably normally distributed in the population.\textsuperscript{24}

Providers of early intervention services correctly flaut the finding that the services are well regarded by patients and families. My question is why we should not simply seek to emulate such excellent service for all patients at all stages of illness and for as long as is required. Boutique stand-alone early psychosis services are potentially divisive and undermine the integrity of the entirety of mental health services. The task will be to ensure the fidelity of those services in a broader integrated service structure, and that will require sufficient funding as well as continual vigilance from clinicians and managers, along with patients and carers.

David J. Castle

If I understand correctly, your (D.J.C.’s) criticism of early intervention services in psychosis is that: (a) early intervention services do not do anything special, they simply provide good care; (b) there is no enduring effect of such services, gains revert when specialist care ceases; (c) long DUP is a consequence of an insidious onset illness, hence introducing early intervention services makes no difference to DUP; (d) early intervention services are the same as prodromal/at-risk interventions, for which there is only weak evidence, which must be balanced against the problem of stigma; and (e) investment into these services is wrong since it occurs at the expense of other mental healthcare.

You state: ‘early psychosis service guidelines read simply as an exposition of good clinical practice’. Thanks to these guidelines, many services are now delivering high-quality care to vulnerable young people long neglected by traditional mental health services. Research studies do not include the ones never diagnosed or treated; the scandal of delay in reaching them has been long ignored.\textsuperscript{25} It was the cry of these neglected and abandoned sufferers and families that partly led to the development of early intervention services.\textsuperscript{26} Almost a decade on, we can assess the impact of implementing early intervention services in the UK. The Schizophrenia Commission, an independent body of 14 experts, recently gathered evidence from 80 stakeholders including health and social care clinicians, academics, service users, carers and 2500 online contributors.\textsuperscript{27} The report describes early intervention services as ‘the great innovation of the last 10 years which everyone says works well’. It goes on to state (the italics are mine):

‘there is a stark contrast in how early intervention services are viewed compared to the rest of the system however. These services are giving people with psychosis hope and their lives back. Obviously this is not the only part of the system where staff work in this way but nowhere else have we seen the constant high standards, recovery ethos, co-production and multi-disciplinary team working.’

Carers and families of patients with first-episode psychosis have long demanded early intervention.\textsuperscript{28} Within mental healthcare for psychosis, early intervention services now contribute most towards relatives’ satisfaction.\textsuperscript{29}

Why don’t generic teams consistently provide high-quality care for people with first-episode psychosis? By their own assessment, generic community mental health teams (CMHTs) do not feel adequately trained and fail to provide appropriate and evidence-based care to patients with first-episode psychosis, especially psychosocial interventions.\textsuperscript{30} This situation preceded the development of early intervention services in the UK, hence lack of staff competence for first-episode psychosis management cannot be blamed on early intervention services depriving CMHTs of trained clinicians. The latest National Institute for Health and Care Excellence guidelines on schizophrenia\textsuperscript{31} concludes: ‘despite the fact that CMHTs remain the mainstay of community mental
healthcare, there is surprisingly little evidence to show that they are an effective way of organising services. As such, evidence for or against the effectiveness of CMHTs in the management of schizophrenia is insufficient to make any evidence-based recommendations. Lacking clear roles, boundaries, responsibilities and remit, CMHTs struggle to delineate what they do well and shed what they do not, and staff do not keep up with the changing evidence base for therapeutic interventions. Therapeutic advances are useful only if therapy can be delivered, and specialist teams are far better than generic teams at engaging patients and delivering interventions. This is the history of improvements in medicine, where specialisation is both an outcome of academic advance and a vehicle for service improvement.

Early intervention service effects appear to endure only as long as the specialist care is provided. This is true for both symptoms and functioning, and evidence is now emerging that early intervention services may also reduce the risk of suicide. Like clinical gains, this effect is also lost in the years that follow cessation of early intervention services care. If early intervention service gains are lost after care reverts to generic teams, this is an indictment of generic care, not a failure of early intervention services. The logical conclusion is that such patients should receive specialist care for a longer period. You agree that early intervention services provide high-quality care, so why are you so keen to withdraw them from those who need them? Altering the long-term trajectory and outcomes of first-episode psychosis may require not only sustained early intervention service care, but a shortening of DUP to weeks rather than months. We should be demanding that all patients with first-episode psychosis get specialist early intervention service care as early as possible and as long as needed, rather than dismissing these services as having only 'short-term' benefits.

Does DUP matter and should we make efforts to shorten it? If DUP did not matter, we would not be treating psychosis, since treatment necessarily ends DUP. Long DUP is associated with a range of poor outcomes, including offending behaviour, violence and homicide. Can all this be explained as poor outcome ‘inbuilt’ into long DUP clinical presentations? Recent treatment delay studies show that initial referral to a CMHT for first-episode psychosis risks increasing DUP. This should really make us worry – generic CMHTs are responsible for more than a third of treatment delay in first-episode psychosis. Even modest periods of untreated psychosis cause severe distress to those with the condition and their families. So knowing that generic CMHT contact lengthens DUP should shine a spotlight on CMHTs and why these are failing to engage our needy and vulnerable patients.

On the positive side, the establishment of early intervention services in the UK has led to a reduction in DUP and an increase in the proportion of patients treated within 6 months of onset. Unlike the TIPS study, early intervention services in the UK do not have an early detection function; just the introduction of these services has led to prompt and proper treatment of first-episode psychosis. Early intervention services in England may have an even greater impact if these were commissioned to actively seek out untreated cases in the community. Investment in early intervention services not only pays for itself, it has the potential for reducing long-term costs and consequences of psychotic disorders to the healthcare system.

Critics of early intervention knowingly or unwittingly confuse three different kinds of ‘early’ interventions: delivering effective care in established first-episode psychosis; a specific early detection function/team that facilitates early access to specialist care; and prodromal or ‘at-risk mental state’ interventions. Mainstream early intervention services have been set up to deliver effective care in first-episode psychosis; the other two functions are usually part of research trials based in highly specialised academic units. No one argues for ‘at-risk mental state’ services to be routinely established. Other than a few public health campaigns, there is no large-scale investment in early detection teams. The evidence base for ‘at-risk’ interventions may genuinely be in a state of equipoise, but that is not a valid criticism of mainstream early intervention services. To deliberately use the evidence base of the former to criticise the latter reminds one of George Berkeley’s comment on philosophers: first they raise the dust, then they complain they cannot see.

Should we not treat people who come to us with ‘at-risk states’ because we might stigmatise them? Given that stigma of mental illness extends to all mental disorders, perhaps we should not treat any mental illness at all, lest our patients are exposed to stigma. Or better we should tackle stigma against all mental illness including psychosis, rather than deprive those individuals who are seeking help, distressed and impaired, of the care that they need.

The criticism that early intervention services should not develop at the expense of other parts of the mental health system is valid. However, in the UK early intervention services were set up with new funding and additional investment. In any other branch of medicine, everyone interested in improving services would welcome new investment into a clinical field. Early intervention services are an excellent paradigm for arguing for early intervention in all mental health disorders by increasing investment in all mental healthcare. The clinical- and cost-effectiveness of early intervention services, the sheer volume of positive feedback from users and carers, the high levels of staff morale in these services and the genuine multidisciplinary of early intervention services should spur fellow clinicians into demanding similar investment into other areas of mental healthcare. In the UK, new investment into mental health services is being discussed, thanks largely to the success of early intervention services. This should be a moment of pride. Instead, early intervention service critics risk allowing service managers and funders to exploit a needless conflict and shift resources internally from one part of mental healthcare to another. By accusing one part of the service of doing ‘too well’, we are letting down our patients, our services and our profession.

Swaran P. Singh

For: rebuttal

I am so pleased that your response to my initial salvo in this debate is so synergistic with my own views. Indeed, you seem to agree with me about just about everything I stated but say you are disagreeing!

I should say that in writing the piece I sought to challenge some aspects of the early intervention for psychosis movement, not to criticise, and certainly not to criticise individuals in the field. I stand by my view that the services do just what they should do regarding good mental healthcare.

I do not believe long DUP is simply a ‘consequence of an insidious onset illness’ but reiterate that the prolonged insidious types of onset have consistently been shown to be associated with poor outcomes. Also, there is much confusion in the field about where ‘at risk’ ends and ‘illness’ begins. Some services include and treat individuals ‘at risk’, whereas others do not.

I certainly do not, as you state, believe that ‘investment into early intervention services is wrong’. Not remotely. I merely believe that the best care should be offered to all people with a mental illness at any appropriate stage of illness: you, as it happens, also espouse this. But unlike you, I firmly believe in integrated services. Arguments for stand-alone services on the basis that staff in generic
services lack certain clinical skills seems counterproductive: surely the response to that is to upskill those staff!

To close, I thank you for your thoughtful endorsement of most of my views.

David J. Castle

Against: rebuttal

I am glad that you seek consensus in this debate. A crucial lesson of the early intervention services era is that radical transformation of staff attitudes and skills is contingent upon specialisation. The Schizophrenia Commission report clearly states that specialist early intervention services teams are ‘examples of good practice . . . offering hope, encouragement and a positive outlook for the way forward’. The report is very clear and specific: to remain effective, early intervention services must retain fidelity to the original specialist model.

Belief in integrated services is not enough; we need evidence. And there is no evidence that generic services are anywhere close to early intervention services in clinical- and cost-effectiveness, ability to engage patients and deliver evidence-based care, or in the positive experiences reported by users and carers. Anyway, specialisation is not inimical to integration. Integration of care is a function, not a service structure.

Since we both aim to provide the best possible care for our patients, and the evidence is overwhelming that such care is delivered by early intervention services, I am happy to join you in answering the query about whether early intervention services are ‘still the best buy’ with a resounding yes.

Swaran P. Singh

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At the Clinic

Neil Ferguson

In the waiting area between Phlebotomy and Doctor Abromowitch’s Clinic, among strangers who have something in common, observe the electronic queue-machine click 90, 91, 92 one digit at a time ad infinitum. Here the space between past and future is almost visible to the naked eye. Twiddle your thumbs. No point getting anxious. Your number will be up in due course.

Stare at the walls, at the NHS posters’ advice on smoking, HIV, arthritis; or at the TV – Richard & Judy Live with the sound down. Or else peruse the copy of The Sun left on a chair by someone who has gone before you, barely glancing at the improbable tits of Tina from Tyneside. Scandal, rape, murder, the War – it’s a fucking mess, but not, while you’re here, your business.

It’s reassuring to be in this dull lull in your life, even if it’s an antechamber to something worse. Soon enough the gent in the striped shirt, cufflinks, bow-tie, with a foreign-sounding name, will greet you and shake your hand and like an understanding headmaster convey with courteous matter-of-factness the results from your last appointment, after which everything will be different.

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