

## **Truth and Reality in Early Intervention**

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### **Truth**

“All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.”

Arthur Schopenhauer

### **Reality**

“I have seen how much progress early intervention teams have made, how innovative they have been, and the impact they are having. I now believe that early intervention will be the most important and far-reaching reform of the National Service Framework era. Crisis resolution has had the most immediate effect but I think early intervention will have the greatest effect on people’s lives.”

Professor Louis Appleby (then) Director, National Institute of Mental Health in England, 10<sup>th</sup> October 2008 at “*Policies and Practice for Europe*” (Department of Health/WHO Europe conference attended by 35 European Countries).

The current debate about the value of early intervention (EI) in psychosis has become something of a 'culture war', and as we know all too well, in war, truth is the first casualty. Such debate about the value of early intervention is a curiosity in medicine. In every other area of health care where potentially serious illnesses are concerned, the value of early diagnosis is now well-accepted. Just as in psychiatry, treatments are not perfect but they are effective enough to justify early diagnosis, e.g., in cancer, arthritis and cardiovascular disease, provided the risks and benefits are balanced at each stage of the disease in question. The question of risk versus benefit is a perfectly valid focus for debate, and it needs data to inform it. Indeed one could argue that the only time that EI is not justified is if there are no effective treatments and that more harm than good results from initiating treatment. This also can happen if people are over-treated, such as with excessive doses of antipsychotic medications in first episode psychosis, or if the latter are used inappropriately in the pre-psychotic or sub-threshold stage of illness. Yet even in Alzheimer's disease, where treatment options are very limited, early diagnosis and intervention does not attract the controversy that it does in psychosis.

The debate surrounding EI in psychosis is not new, and characterized the initial stage of the Blair government's national mental health reform in the UK over a decade ago. Then it was the same phenomenon: a small cadre of academic psychiatrists sought to use the evidence-based paradigm to introduce doubt, retard genuine progress and defend the status quo. This was despite existing services demonstrably letting down young people with early psychosis and their families (Garety 2001). Despite this rearguard action, the EI reforms went ahead and ten years later were described by Prof Louis Appelby (TRACK conference, Birmingham 29 April 2009) as "the jewel in the crown of the National Service Framework" because: a) service users and families like it; b) people get better; c) it saves money. In Canada, Denmark and many other jurisdictions, EI has proceeded without acrimony or controversy, and there is widespread coverage of the system with these specialized streams of care, which are very highly valued by the community and by most professionals.

Undoubtedly mental health reform should be as evidence-based as possible. As is the case in physical health reform, when the current mental health treatments and services are struggling to generate the health outcomes their clients need—despite the best intentions and efforts of the dedicated and resilient clinicians who populate our system—reform and cultural change is required. We need a realistic set of evidence standards to prevent wasteful investments and to give the green light to best buys. Cochrane unreconstructed cannot be the sole tool as it was designed not for health services research but to assess individual treatments (McGorry, 2012). In the Australian Federal Government's May budget of 2011, of a total of 2.2bn, \$220m was allocated to create a distinct community-based stream of care to deliver early detection and stage-specific care for young people in the early years of psychotic illness. Of the package of reforms, this was the element with by far the strongest evidence base to support of it. However, the largest share of funding in the package (\$571m) was allocated to people with severe and enduring mental illness, and while this is welcome, the model through which this will be implemented has not been finalized or tested at all.

Similarly, many other recent reforms such as building up resources for mental health in emergency departments (e.g., the Enhanced Crisis Assessment and Treatment Teams - eCATT (Victoria) and Psychiatric Emergency Care - PEC (NSW) programs) and sub-acute bed programs, while responding to manifest needs have not been subjected to any evaluation or health service research. However, despite this total lack of evidence, they have escaped any scrutiny from Professor David Castle and other critics. Why this double standard? What should be the onus of proof? Could it be that EI is truly transformative and therefore challenging to those who find change difficult? It is most interesting to note that there is very widespread consumer and carer support for EI, and that all the criticism from these quarters i.e., young consumers and their families, is of the system that Castle (2012) believes, in the face of all the evidence to the contrary, is able to deliver EI successfully. All sides of politics in all jurisdictions in Australia support early intervention for psychosis and are investing in it. Castle makes the claim that most psychiatrists are not supportive. He bases this on push polling from an online newsletter funded by the pharmaceutical industry that, having run several “features” on EI, attracted only around 100 psychiatrists out of over 3,000 in Australia to vote. It is surprising that a senior academic would be willing to support his case with this type of dubious data.

Castle (2012) provocatively implies in his title that somehow people are being misled about the evidence involved. This assertion rapidly dissolves in the course of his highly selective and biased critique that follows. However, the primary issue is to establish the onus of proof when reforms are being considered. I have always stated that given the serious damage to peoples’ lives that occurs when treatment is delayed and when it is provided in a crude way with overmedication, coercion and a desultory approach to engagement, tenure and holistic comprehensive care during the critical years of illness, that the onus of proof is on the critics to show that standard care is safe and effective. Castle’s study, with methodology of much poorer quality than the array of health services research in EI, is not only silent on health outcomes, but actually showed that the key variable of duration of untreated psychosis (DUP) worsened within their service after they chose not to use government funds intended to establish an early psychosis team for that purpose.

Castle (2012) claims not to be against early intervention, but then proceeds to dispute the evidence related to all three pillars of the paradigm (even that relating to the effects of treatment delay, which he says he acknowledges as a serious problem in his own service). An objective survey of the 20 year international evidence base on early psychosis shows the following. Most people who develop a psychotic illness experience a period of subjective distress and functional impairment which justifies a need for care for some time prior to the onset of sustained and severe positive psychotic symptoms. Some of these people seek help, and using the UHR criteria originally developed by Alison Yung and I, a meta-analysis has shown that in addition to their immediate needs that 36% of them will become psychotic within three years (Fusar-Poli et al., 2012) Another meta-analysis has shown that intervening reduces this risk to less than 10% and that simpler and safer treatments such as CBT can do this as effectively as antipsychotics (Prete and Cella, 2010). When they are offered such care in

stigma-free settings like the PACE clinic or *headspace*, the symptoms and substantial functional impairments that led these patients to seek help are significantly better after 12 months. More research is undoubtedly needed to clarify the sequence and duration of interventions required, and whether other (non-psychotic) poor outcomes can be prevented. Unfortunately for the principle of evidence-based medicine, some critics have recently sought to censor such research through coordinated pressure exerted through mainstream and social media, through frivolous freedom of information requests which consume the time and energy of researchers in universities, and through concerted public pressure exerted on the decisions of independent, NHMRC-approved ethics committees, as well as in the pages of this journal (Stark, 2011; Raven et al., 2012). Such anti-scientific behavior could have prevented the existing and still incomplete evidence base from being assembled, and seeks to threaten further legitimate and ethical research in a field which clearly remains in equipoise and is in need of more data.

Secondly, reducing the duration of untreated psychosis reduces the immediate psychosocial damage and risk of traumatic forms of service entry and suicidal behavior (Marshall et al., 2005). In the long term, it improves the level of negative symptoms (Larsen et al., 2011). Castle appears to agree that reduction of DUP is worthwhile, since he and co-authors express concern that in their service they have not only failed to reduce median DUP, but that the mean has increased to a staggering two years, as bad as recorded anywhere in the world (Petrakis et al., 2011). In terms of onus of proof, one is always prompted to ask critics what level of delay would they regard as acceptable once someone is frankly psychotic?

Finally, the key issue for the mental health reform agenda is that of the need for a distinct culture or stream of care for the mostly young patients with first-episode psychosis during the critical early years post-diagnosis. Though he chooses to challenge all elements of early intervention, this is Castle's real target and he asserts, without any evidence whatsoever, that the EI and youth mental health reforms are somehow going to damage mental health services rather than positively transform the system. It is revealing that his concern is focused on the health of the current services, rather than on that of consumers and families. The evidence from two large health service level RCTs (Bertelsen et al., 2008; Craig et al., 2004; Garety et al., 2006) and several quasi-experimental studies, and also from five cost-effectiveness studies (McCrone et al., 2010; Mihalopoulos et al., 2009; Valmaggia et al., 2009; Cullberg et al., 2006; Goldberg et al., 2006) all supports the disease-modifying effect of this reform and its value for money. To my knowledge there is no published counter-evidence. Some of these benefits are due to the ability to provide comprehensive stage-specific care in such settings, but a vital feature is that because the culture of care is quite different in terms of developmental and family sensitivity, optimistic recovery orientation and engages patients at more than twice the level of standard care, patients actually get what they need: hope for the future, lower doses of antipsychotic medication, holistic care, reduced suicide risk and better functional outcomes. It is true that some, but not all, of the outcome gains (but certainly not the cost savings) are lost when patients are transferred back (prematurely it is now

clear) at two years to standard care. However, a recent Canadian study (Norman et al., 2011) has now shown that retention in an EI culture for five years, even at lower intensity, protects patients from this effect (which is partly due to failure to engage or retain tenure in the standard service). This is not just due to the provision of “good clinical care” but to the continuation of streamed early psychosis care for longer. Finally, returning to the onus of proof issue, even though modifying the longer-term outcome would be extremely positive, even if EI services are able to deliver better outcomes only while they are managing the patient, then that is already a genuine benefit (as it would be in any illness). Castle has sought to impose a level of proof that is deliberately higher than appropriate. Yet it looks like this can be reached anyway, especially if a good beginning can be built upon positively.

The fact that EI actually saves money gives the lie to the oft-repeated assertion that EI diverts funds from existing services. In fact, substantial new money which has been accessed under the mental health reform agenda means that savings rapidly occur which can then be directed to the subset of patients who, despite early intervention, genuinely require long-term care. Mental health reform has not only provided a new injection of funds for EI but much more for other stages of life and illness. Even the Better Access cuts (which were never specifically derived from the EI/youth mental health investments any more than any other aspect of the whole package, i.e., the large allocation for severe and enduring mental illness), have now been postponed, hopefully until a genuinely better model is developed for the people who need longer-term interventions. This is all to be warmly welcomed, and helps to finally lay the diversion argument to rest. We need to transcend such false dichotomies. Mental health reform and investment is not a zero sum game; we need sustained and sequential growth and investment in many domains. Early intervention and longer term care are both critical, and better cultures need to be urgently created for longer term care. While some may not welcome change, I do not think many psychiatrists or mental health professionals, who struggle to do their best within a neglected and stagnant system, are at all satisfied with the status quo. Certainly many patients and families are not. Neither is Professor Vaughan Carr, quoted in an opinion piece, Professor Carr has argued elsewhere passionately for a radical redesign of the service system (Carr, 2010) in contrast to Castle (Singh and Castle, 2008) who is an apologist for it. The pattern of age of onset in psychiatry and the cultures of care we need to develop are substantially different from those in general health care and they vary across the lifespan and stage of illness. After a decade of mainstreaming we need to redesign, re-engineer and transform, not compromise and prop up a struggling system with protocols and care pathways. We won't sail off the edge of the world, but we could discover a new one.

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