Substance use in early intervention services for psychosis

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Abstract

Purpose – This paper seeks to outline the nature of early intervention (EI) services in psychosis and to discuss substance use in clients in this setting. It considers ways of working with EI clients where substance use is an issue.

Design/methodology/approach – The paper begins by outlining the nature of EI services and early psychosis, then goes on to discuss the impact and management of substance use in this setting.

Findings – The authors argue that the EI approach may be very appropriate for this subset of clients.

Originality/value – This paper focuses on the issues of treatment of dual diagnosis within a specialised area of mental service provision. EI services for psychosis aim to provide early detection and treatment of psychosis, particularly through increased emphasis on psychosocial interventions.

Keywords Early intervention, Psychosis, Substance misuse, Psychosocial interventions, Psychiatry

Paper type Conceptual paper

Introduction

Early intervention (EI) services for psychosis have developed rapidly during the last decade and substance use is commonplace in their clients. In this paper, we begin by outlining the nature of EI services and early psychosis, then go on to discuss the role of substance use in clients in this setting. We will argue that the EI approach may be very appropriate for this subset of EI clients.

EI services

EI services aim to improve outcomes for people with functional psychosis by providing effective help as early as possible. They are based on the notion of a ‘‘window of opportunity’’, that is a limited period where interventions will have more impact than later on. There are three important aspects to the work of EI services:

1. Intervention is offered as early as possible. Some services offer a service not just to individuals who already have psychosis, but also to those deemed at high risk of developing psychosis in the near future – a group said to have an ‘‘at risk mental state’’ (ARMS) or ‘‘psychosis risk syndrome’’.

2. Interventions are tailored to the needs of the client group, and to their developmental stage and illness stage. They include psychological interventions such as cognitive behavioural therapy and family interventions, and help with social inclusion, so that young people with psychosis can get back on track as soon as possible with friendships, work, study, etc. – or avoid having these disrupted in the first place. Antipsychotic medication is given in low doses.
3. The style of service is also adapted to the needs of the group, for example accepting uncertainty over diagnosis, focusing on addressing problems rather than diagnosis, and engaging assertively. Efforts are made to minimise stigma and to support hope. “a therapeutic culture of respect and recovery” (Smith et al., 2010).

Guidance on how EI services should operate has been provided in England through Policy Implementation Guidance published by the Department of Health (Department of Health, 2001). International standards have also been agreed in a consensus statement (Bertelotte and McGorry, 2005). Different EI services have different structures and modes of operation. Box 1 outlines the structure of one such service.

There is growing evidence that EI services are effective (Smith et al., 2010; NICE, 2009). Evidence suggests that at least in the short term, they can improve outcomes in respect of relapse, readmission rates, symptom severity, quality of life, engagement and access to psychological therapies (NICE, 2009; NHS Confederation, 2011), though with the disadvantage of loss of continuity of care (Kingdon, 2011). There is emerging evidence that costs of EI may be offset by savings in other parts of the mental health service, particularly inpatient care (McCrone et al., 2010; NHS Confederation, 2011). However, it is not clear that benefits are sustained beyond the period for which EI is offered. It is suggested that the ways in which EI services achieve their aims may be primarily through the increased emphasis on psychosocial interventions, which is in turn achieved through improved staff and client ratios (Brabban and Dodgson, 2010).

Psychosis

Psychosis is often discussed as if its meaning is uncontroversial. A typical definition is “a mental health problem which changes a person’s experience of reality”. However, agreeing what is and is not psychosis can be more complicated. Psychosis is an umbrella term, which encompasses very different patterns of difficulty, and particularly in the early stages, symptoms may be subtle and varied, and rather unlike the textbook descriptions which are used as reference points. There is an overlap with other diagnoses, such as dissociative and personality disorders and there is also a growing recognition that psychosis-like experiences are common in the general population (van Os et al., 2007).

Psychosis is a descriptive term and not an explanation of the causes of symptoms. The causes are complex and interrelated. Psychosis is more likely if there have been disrupted attachments, adversity or trauma, particularly in early life, as well as being more likely if there is genetic vulnerability, perinatal problems, neurodevelopmental disorders – or substance use. Biological factors may affect life experiences, and life experiences may influence biology, with the balance of influence between biological and non-biological factors differing between individuals. One person may have a strong family background of psychosis and no obvious history of adversity whereas another person’s story may be dominated by trauma and loss. See Box 2 for an example case of the development of psychosis.
In psychosis, the person’s experience of external and internal reality changes, often with the effect of creating a more bearable “new reality”. Often the psychotic symptoms themselves give clues to the underlying issues, for example in the words of a hallucinatory voice or the content of a delusional idea.

Substance use in EI clients

Broadly speaking, substance use is:

- more common in people with early psychosis than in their non-psychotic peers;
- associated with poorer outcomes; and
- associated with more challenges in treatment;

However, such summary statements obscure a complex reality with differences between different substances, and most importantly differences between different EI clients in the role that their substance use plays in their lives, illness and treatment.

Prevalence

The prevalence of substance use amongst EI clients is approximately double that of age-matched controls (Barnett et al., 2007). Amongst ARMS clients, it is higher among those who go on to develop psychosis (Cannon et al., 2008). In the Lancashire EI service, cannabis and alcohol are the substances where misuse is more frequent. This is the same in other services, for example the CAMEO service in Cambridgeshire, where 51 per cent had cannabis use or dependence, and 43 per cent were misusing alcohol (Barnett et al., 2007).

There are different possible reasons for the increased prevalence of substance misuse in EI clients. Studies of the kind described are cross-sectional and do not help us understand the direction of causation. However, taking studies of cannabis for example, it is interesting to note that in the many studies where a significant association between cannabis risk and psychosis is demonstrated, adjustment for other factors that predispose to psychosis greatly diminishes the strength of this association (Arsenault et al., 2004). However, there is also evidence that cannabis use increases the risk of later developing persistent psychotic symptoms (Kuepper et al., 2011) and that both cannabis and alcohol use may bring forward the onset of a psychosis that would happen anyway (NICE, 2011). There are also indications that the reverse may happen, and substance use may sometimes be fuelled by psychosis, for example in studies that show that positive symptoms predict relapse to cannabis use (Hides et al., 2006). Mechanisms may be that substances are used to relieve dysphoria related to illness (probably general dysphoria rather than specific symptoms), and to counteract antipsychotic-induced effects such as impaired dopamine-mediated reward mechanisms (NICE, 2011).

Box 2. Case history – development of psychosis

David’s father was violent to his mother and himself left the family when David was five, then had little further contact. David had not gone to nursery because he would get so distressed at leaving his mother. At school, he was shy and quiet and was sometimes bullied, but got reasonable marks and had a few friends. He started college but in the first term was struggling with the work, then unfortunately was the victim of an assault and in hospital for several weeks. He seemed to recover and went back to college almost immediately, but found it harder and harder to cope, used more and more cannabis and eventually dropped out. He gradually developed a strong belief that his assault had been a communication from God, marking him out as having a special destiny and he felt there were people everywhere watching him to find ways of attacking and undermining him.

There are hints of an insecure attachment and a history of early experiences of violence likely to have had an influence on how David experienced the assault. His use of cannabis may have accentuated his biological vulnerability. His psychosis contains some expression of his inner world and its sources of insecurity.
Outcomes for EI clients who use substances are mixed. For clients whose psychosis has developed in the context of substance use but who then stop using this substance, outcomes are better than those who continue (Turkington et al., 2009) and sometimes better than those who have never used substances (González-Pinto et al., 2011). It is worth emphasising that many EI clients do discontinue their problematic substance use after becoming ill, for example approximately 50 per cent in one study (Turkington et al., 2009; Archie et al., 2007). It is unclear how often this is due to the shock of illness, the support of services, or the relief of dysphoria through medication. Rates of stopping may be different for different drugs, e.g. Canadian study suggests that heavy alcohol use may be much more persistent (Archie et al., 2007).

On the other hand, clients who continue to use substances such as alcohol, cannabis and stimulants have less good outcomes. The literature shows that substance use is linked with higher rates of relapse and incomplete recovery, and with risks to self and others (Wade et al., 2006, 2007). There is some variation with substances, for example, in one study, drug use but not alcohol use was associated with increased readmissions (Sorbara et al., 2003). Clients who continue to use substances also cause more concern on a day-to-day basis. This would be apparent to anyone watching an EI team at work – substance use is common among the clients staff bring up for discussion in the daily team meeting, among those who require urgent input or detailed case discussion, and among those being admitted to hospital. It is also more common amongst those of our clients who die prematurely.

Why is substance use linked with poorer outcomes in early psychosis?

There are various possible direct pathways that may link persistent substance use with poorer outcomes for psychosis:

- **Biological.** There are the direct risks of the chemical effects of the substance leading to an increase in psychological symptoms, or physical ill health or even death. There are also indirect risks through the substance use causing disinhibition and adverse outcomes such as violence or self-harm.

- **Behaviour and lifestyle.** It is evident that some of the things which may be associated with a lifestyle dominated by substance use – difficulties in relationships, debts, fear, homelessness, unemployment, etc. are going to add to the stressors that may contribute to psychotic breakdown.

- **Psychological stressors.** Even among people continuing to use drugs, their drug use can be a factor contributing to negative self-image. In a handful of those recovering, guilt and regret seem to add to inner turmoil.

- **Family factors.** These can be a crucial factor in recovery from psychosis, and for people where substance use has undermined this, can be much less available.

- **Community factors.** Being viewed negatively by others because of current or past substance use may limit opportunities for social inclusion and for establishing a lifestyle, which is stable and beneficial for mental health.

- **Services.** These may be less readily helpful to people whose problems include substance use as well as psychosis.

There may well be a vicious spiral with substance use for example heightening biological sensitivity or adding to life stressors, and with the distress of psychotic symptoms increasing appetite for substance use. An additional explanation may be that there may be links between substance use and particular forms of psychosis with less-favourable prognosis. For example, cannabis use seems linked with earlier onset, long prodrome and delayed help-seeking, all of which are poor prognostic factors. However, most importantly, persistent substance use and poorer outcomes for psychosis may also be linked through shared underlying causes. For clients with persistent substance misuse and clients with psychosis alike, adverse early life experiences are frequently part of the story. Current adversity is also common in both groups; psychosis and persistent substance misuse can introduce overlapping problems – practical stressors, loss of sustaining relationships and loss of
interest in these, loss of self-esteem, loss of self-efficacy. All of these fuel the inner securities that make more pressing the need for the desperate measure of denial of reality, whether through psychosis or through drugs. Thus, for an individual client, the relation between their substance use, their life, and their recovery is likely to be complex, and individual.

**Approaches to management of substance use in EI clients**

Decisions about how best to manage substance use in EI clients have a limited direct evidence base. However, we can usefully draw on the literature on treatment of substance use in other settings, on published guidance, on practice-based evidence and on theoretical considerations.

The wider literature on addressing addictions has been expertly summarized (Sellman, 2010). There is some evidence that helpful interventions include reduced access to substances, increased social support and general treatment of mental health problems, e.g. medication for psychosis can protect against cannabis relapse (Hides *et al.*, 2006). In addition to guiding intervention, the wider literature is important in contextualizing efforts to help. It is helpful in particular for staff to be aware that addictions are a relapsing and remitting problem, with only a proportion recovering and remaining symptom free, and that time is needed to progress through stopping, developing a substance free life, practising living it with support and continuing to live it unaudied (Sellman, 2010). This is a course of recovery not very different from that with more persistent forms of psychosis.

Evidence for interventions in people whose problems include both substance misuse and psychosis is less extensive (Drake *et al.*, 2007; Cleary *et al.*, 2008), though there has been a wealth of guidance based on expert opinion (Department of Health, 2002; NICE, 2011). Some apparently promising interventions have not been supported by evidence, for example one study found that brief training in dual diagnosis for community mental health team staff did not improve outcomes (Johnson *et al.*, 2007). Evidence specific to interventions in EI clients is even more limited.

In summary, literature and published guidance (Department of Health, 2002, 2007; NICE, 2011), suggests that services need to take account of the following points:

- Services for psychosis and substance use should not operate in isolation from each other.
- An assertive, approach to engagement and a respectful, non-judgmental approach are likely to be helpful.
- Of the therapeutic approaches likely to help, motivational interventions, cognitive behaviour therapy and group approaches have the most evidence.
- Measures to improve the cost-benefit balance of continuing to use are important. These might include:
  - reducing symptoms which may drive substance use (e.g. through substitute prescribing or treatment of other problems, e.g. reducing distressing psychotic symptoms with antipsychotics);
  - avoiding living and leisure circumstances which promote substance use; and
  - promoting achievements and satisfactions (work, relationships, leisure activities, etc.) that may help to increase inner security, reduce the need for denial of reality and make substance use feel less essential.

For EI services, providing some of these things may mean in some instances accessing specialist services (e.g. for substitute prescribing or specialist psychological intervention) or tailoring some of the specialist psychological approaches provided within the teams. However, providing most of them is simply the core work of EI. This includes for example assertive engagement, psychological interventions tailored to the individual’s priorities and help with the basics of life – accommodation, work, social life, etc. Box 3 describes one service’s approach to integrating work with substance misuse. In summary, the evidence suggests that the core activities of EI services may be helpful to people with
substance misuse, but it rather unclear what specific interventions for substance misuse should supplement this.

The process of working with substance use in EI clients

Box 3 outlines the kind of intervention offered to EI clients with substance use problems, but does not capture the experience of offering it, for example as illustrated in the case example in Box 4. An important feature of work with these clients is that there are other factors that frequently loom large in their care. These are frequently clients who also attract labels of personality disorder, “not really ill”, “manipulative”, etc. who present worrying risks and who practitioners feel should not be in the service. They bring extra challenges in diagnosis, and they generate not just extra practical tasks, but also extra psychological work.

Although EI services focus on problems rather than diagnosis, there is still a need for categorical decisions, for example decisions about who should receive a service, and about who gets an antipsychotic and who does not. For clients with significant substance use,
such decisions may be difficult in all sorts of ways. There can be technical problems in that it is often unclear whether psychotic symptoms are due to intoxication effects rather than functional psychosis, particularly as there is no agreement about how long symptoms can persist after discontinuing a drug and still be expected to disappear through this measure alone. This is particularly unclear when there is polydrug use, and particularly in early episodes of psychotic symptoms where there is no established pattern to refer back to. The situation can be complicated by clients providing incomplete or conflicting information, being unable to remember, or telling different things to different people, also by the team having difficulty maintaining contact even for the duration of a period of assessment. It can also be complicated by staff having conflicting and sometimes strong views about what is wrong and what the client needs, and by differences between different teams reflecting their different priorities. Problems in diagnosis can have an important impact for clients – they can delay effective treatment, lead to ineffective treatment and lead to clients being given misleading information, very much at odds with the aims of EI.

Clients who use substances generate extra tasks for staff (Kavanagh et al., 2000). This may include:

- Providing specific interventions for substance use, liaising with substance misuse practitioners and dealing with additional medical challenges, such as prescribing alongside substance use, and managing physical health issues.
- Work generated by diagnostic difficulties, including extra assessment appointments and possibly large amounts of work with individuals who turn out not to be eligible for the service.
- Dealing with more persistent symptoms, more relapses, more hospitalization.
- More crises, more urgency, more risks and more risk management.
- More effort to engage the client, with missed appointments, misuse of prescribed medication, etc.
- More difficulty establishing a therapeutic relationships with clients who may have a complex agenda, lie, be abusive, or behave very differently on different occasions.
- More complex relationship with families, for example secret communications, pressure to take sides, working with families who feel desperate.
- More complex relationships with other teams, through working in with systems which tend not to welcome these clients, and where more effort than average is needed to secure accommodation, work experience, hospital admission, etc.

However, most of these extra tasks are not ones that require a different set of skills from other work in EI services.

Persistent substance use in a client may also be associated with extra psychological demands on staff. These clients are frequently not the “ideal client”. They often do not leave us feeling helpful, skilled or appreciated. In our experience, there are some common themes in discussions of about this client group – feeling powerless, unskilled, anxious about risks which are difficult to manage, feeling responsible for things not going well, feeling under pressure to do more and generally feeling demoralized – or angry. Although the literature is limited, similar themes have been found in other services, for example Coombes and Wratten (2007) discuss staff concerns about feeling deskilled and dealing with hostility to substance use from other teams and organizations. Some of the psychological demands on staff may be particularly challenging in EI services, where the philosophy of EI is about hope and optimism, and about better outcomes, where many practitioners have come to EI with renewed optimism and expectations of doing a better job, and disappointments may be correspondingly harder to bear.

In part the psychological task for teams is about managing the psychological demands without resorting to strategies which are unhelpful to our clients. Even in a team where attitudes to clients are consistently respectful and non-judgmental, there are still the hazards of our own psychological defences. These can include for example:
Unwarranted certainty – for example certainty about whether the client does or does not have a functional psychosis (there are often polarised views about this amongst different staff groups, alerting us to the possibility of this being a split response, with each group holding only part of the story).

Avoidance of the client – including finding a rationale for not accepting or for prematurely discharging a client (or prematurely discharging them from hospital). This may sometimes unwittingly include an element of retaliation.

Identification with the client and denial of the significance of a substance misuse issue. This may reduce tensions in the relationship and also reduce feelings of disappointment and helplessness.

Cynicism – another way of not feeling the disappointment of failing to help is to hold the belief that helping is impossible, and that nothing could make any difference. It is hard to feel both that there is a problem which may be helped, and that the same time that we are not managing this.

In EI services, the diagnostic uncertainties (Is the client really ill? Should he be in the service at all? Is he lying?) may increase the chance of split views. Specific eligibility criteria for EI services also open up the option of avoidance of the client through deciding they are after all ineligible for the service. Perhaps, the most important tool for staff in managing the psychological demands is having a framework for recognizing and reflecting on the psychological pressures, and on how our own feelings may influence the nature of the care we provide. A psychodynamic approach can be helpful.

Conclusions

In summary, psychosis has complex psychological and social roots, as well as biological ones, and ongoing psychological and social influences have an impact on outcome in many ways. When substance misuse problems persist and play an important part in the client’s story, then it may be particularly important to attend to these, including to the psychological demands on staff and the potential for the psychological needs of practitioners to affect the care they offer. We suggest that in EI services, as in other services, attempts to use recommended interventions need to be informed by attempts to understand the individual, the factors driving their difficulties, and the complexities of their relationships with practitioners and services. Using psychodynamic and systemic principles may be helpful. Many EI services, through better staffing ratios and more emphasis on psychological aspects of care, have the opportunity to offer more holistic approaches to psychosis treatment than traditional services, and may be particularly appropriate for clients with persisting problems with substance misuse as well as psychosis.

References


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