Cognitive Behavioural Therapy for Psychosis

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Cognitive Behavioural Therapy for psychosis (CBTp) and Family Interventions (FIp) are two psychological approaches to working with psychosis[1] that are valuable adjunct therapies, especially for those who remain symptomatic despite optimal pharmacological treatment. Both CBTp and FIp have solid empirical evidence bases and are recommended by national UK and US treatment guidelines (National Institute for Health and Clinical Excellence (NICE 2002, 2009); US Schizophrenia Patient Outcomes Research Team (PORT), (Kreyenbuhl et al. 2010). This chapter will outline the current evidence for CBTp (see Chap. 13 for Family Interventions in Psychosis), give an overview of its key clinical components, and describe some of the latest initiatives in the development of CBTp.

[1] We use the term 'psychosis' rather than 'schizophrenia' in this chapter as in therapy we are referring to a spectrum of phenomena rather than a specific diagnostic category.

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10.1 Introduction

Cognitive Behavioural Therapy (CBT) is a highly effective talking therapy that has been used across a wide spectrum of clinical disorders, age groups, intellectual abilities, settings and cultures. At its most simple, the CBT model proposes that in any given situation, a person's cognitions (such as thoughts, beliefs, and mental images) will directly influence their emotional, physiological and behavioural responses. However, cognitions are highly susceptible to both past and present experience, so if a person is having current difficulties or has had previous adverse life events, this can lead to biased, exaggerated and/or inflexible thinking patterns and processes. Interactions between the four component parts of the CBT model (cognitions, emotions, physiology and behaviour) can lead to the creation of a 'vicious cycle', which acts to exacerbate and maintain the initial problem. CBT aims to assess and formulate vicious cycles in the 'here and now', in order to identify and implement effective interventions that will bring change in each domain, and in doing so, alleviate distress and allow the person to function better and achieve their goals. CBT can also help a person understand how their past experiences may continue to influence their current cognitions though systematic biases. By increasing understanding of these links, re-evaluating past events and working to change ingrained, less adaptive thinking patterns and behaviours, CBT can move beyond simply working in the 'here and now' to preventative therapy to reduce the likelihood of further occurrences of distress.

CBT initially focussed on the treatment of emotional disorders (Beck et al. 1979). Although Beck published a case study of CBT for psychosis in 1952, it was not until the 1990s and early 2000s that the first books on the application of CBT to psychosis were published (Fowler et al. 1995; Kingdon and Turkington 1994, 2005; Chadwick et al. 1996; Nelson 2005) and empirically based cognitive models of psychosis were developed (Birchwood and Chadwick 1997; Freeman et al. 2002; Garety et al. 2001, 2007; Morrison 2001; Bentall et al. 2007). Although these models differ in some regards, they share the basic tenet that it is not the presence of unusual or anomalous experiences per se which cause the distress and disability associated with psychosis, but the person's appraisal of these experiences as external, personally significant and/or threatening, that results in a significant increase in negative emotions (e.g. anxiety, depression, hopelessness, anger) as well as behaviours that the person believes help prevent the feared outcome (i.e. 'safety seeking behaviours'), but which serve to maintain and perpetuate the negative appraisals by preventing disconfirmation. The aims of CBTp therefore are to work collaboratively with the person with psychosis to help them gain a better understanding of their experiences and the factors that might have contributed to these, enhance ways of coping with psychotic symptoms to improve functioning, learn adaptive strategies to manage emotional distress, recognise how certain cognitive processes and overt behaviours might be contributing to maintaining the problem, test out alternative responses and see if individuals might be open to considering different, less distressing, ways of appraising their experiences.

10.2 The Evidence Base for the Efficacy of CBTp

Over the past few decades a substantial number of clinical research trials of CBTp have been conducted and evaluated. There are several useful ways to review these data: overall effect sizes of CBTp from meta-analyses and analyses of the efficacy of CBTp in terms of client groups, target symptoms, as well as client and therapist factors.

10.2.1 Meta-analyses of Randomised Controlled Trials of CBTp

To date, there have been eight meta-analyses reviewing different number of trials (Jauhar et al. 2014, $n = 52$; Jones et al. 2004, $n = 19$; Jones et al. 2012, $n = 20$; Lynch et al. 2010, $n = 9$; Pfammater et al. 2006, $n = 17$; Sarin et al. 2011, $n = 22$; Wykes et al. 2008, $n = 33$; Zimmermann et al. 2005, $n = 14$). The two largest of these meta-analyses (Wykes et al. 2008; Jauhar et al. 2014) found a 'moderate' effect size on the targeted primary outcome of 0.40 (33 studies; Wykes et al. 2008), and on overall psychotic symptoms of 0.33 (34 studies; Jauhar et al. 2014). These results are mainly consistent with other meta-analyses whose effect sizes ranged from 0.37 (Zimmermann et al. 2005) to 0.47 (Pfammater et al. 2006). A more conservative estimate of 0.19 was reported in the meta-analysis with the smallest sample size of nine trials (Lynch et al. 2010), but this excluded a number of relevant trials and received some criticism of the methodology used.

Despite the consistency of positive outcomes in the meta-analyses of randomised controlled trials (RCTs), the effect sizes remain modest, and are significantly reduced in trials where blinding of the assessors did not occur (Wykes et al. 2008; Jauhar et al. 2014). One other recent review (Jones et al. 2012) compared CBTp to other types of psychological interventions with psychosis and concluded that CBTp did not show a convincing advantage over other therapies. However, the authors suggest that there might be some longer term advantage in CBTp for dealing with emotions and distressing feelings, and some initial findings indicated that CBTp may be of greater benefit to people with depression and managing its symptoms. In part the modest research evidence could be due to issues inherent in research designs. RCTs of CBTp tend to be comprised of composite CBT approaches for heterogeneous groups of patients and attempt to address psychotic symptoms, affective disturbance, schemas, social functioning and relapse, while measuring multiple outcomes. This approach is necessary given the selection of participants for most trials by broad diagnostic group rather than for particular problems, but this approach can limit any assessment of what works for whom, and potentially masks what is, and what is not, being dealt with effectively in therapy (Jolley and Garety 2011). Trials of CBTp delivered in routine practice have demonstrated effectiveness (Krakvik et al. 2013; Lincoln et al. 2012; Morrison et al. 2004; Peters et al. 2010) and there is some evidence that clients continue to improve after therapy has ended (Sensky et al. 2000; Turkington et al. 2008), which was not taken into consideration by some of the meta-analyses (Jauhar et al. 2014).

It has been argued (Birchwood and Trower 2006; Slade and Priebe 2001) that the design of most current RCTs, based on those designed originally to test the efficacy of pharmaceuticals, may not be directly translatable for therapy trials. RCTs of CBTp are expected to include the reduction in psychotic symptoms as outcome measures, and some meta-analyses have excluded all other outcomes, regardless of the target of therapy (Jauhar et al. 2014). However, in routine therapy outcomes are often client led, recovery orientated, and focussed on achieving personally significant functional goals which may not always involve the removal of, or reduction, in positive symptoms. Trials that have used more psychological outcomes, such as compliance with command hallucinations (Trower et al. 2004) or global functioning (Grant et al. 2012) have reported larger effect sizes. Moreover, in a planned analysis of the most effective elements of CBTp of a recent RCT (Dunn et al. 2012) where the overall effect of CBTp in the full sample was limited to improvement in depression at 24 months (Garety et al. 2008), it was found that the clients who engaged with the active techniques in therapy and received a full course of CBTp had gains that were both clinically and statistically significant. Those who dropped out of therapy or whose therapy never progressed past the engagement/assessment stages did not benefit on the reported measures of change. Clearly more research is needed to identify these clients with whom CBTp is most efficacious and cost effective on which specific outcomes.

10.2.2 Efficacy in Different Client Groups

Another useful way to review the empirical literature on CBTp is to analyse what works best for different client groups. By far the strongest evidence is for the effectiveness of individual CBTp in people with treatment-resistant psychosis (e.g. Grant et al. 2012; Klingberg et al. 2011; Kuipers et al. 1997, 1998; Lincoln et al. 2012; Peters et al. 2010; Rector et al. 2003; Sensky et al. 2000; Tarrier et al. 1998, 1999; Turkington et al. 2008; Valmaggia et al. 2005). There are some client groups where the evidence so far is limited and/or equivocal, such as in 'dual-diagnosis' clients, where CBTp is combined with motivational interviewing (Barrowclough et al. 2001; Haddock et al. 2003); forensic populations and those with a history of violence (with positive outcomes for aggression and self-esteem: Haddock et al. 2009; Laithwaite et al. 2007), older adults (in terms of increasing social functioning and cognitive insight: Granholm et al. 2002, 2005), and clients from minority ethnic groups in the UK (Rathod et al. 2013). In terms of CBTp helping to prevent relapse, the evidence is mixed with some studies showing a good outcome (Barrowclough et al. 2001; Drury et al. 1996; Gumley et al. 2003; Dunn et al. 2012) but others not (Barrowclough et al. 2006; Drury et al. 2000; Garety et al. 2008; Tarrier and Wykes 2004). Although the evidence for CBTp so far is almost exclusively as an adjunct to medication, a recent pilot found that it may also help people who have chosen not to take medication (Morrison et al. 2012) with a full-scale multi-site RCT underway (Morrison et al. 2013).

10.2.3 Efficacy in Different Symptom Types

In terms of outcomes for specific symptoms of psychosis, the strongest evidence is for positive symptoms of psychosis (Wykes et al. 2008), although to some extent this is because the majority of trials have had positive symptoms as their primary outcome measure. Of these studies, the largest effect size of any trial of CBTp was for the pilot study targeting command hallucinations (Trower et al. 2004), with a multi-centred trial underway (Birchwood et al. 2011). CBTp has also been found to help alleviate negative symptoms in several studies (e.g. Grant et al. 2012; Johns et al. 2002; Klingberg et al. 2011; Rector et al. 2003; Sensky et al. 2000; Turkington et al. 2008).

As well as improving symptoms of psychosis, CBTp has been found to be effective at reducing depression (Garety et al. 2008; Morrison et al. 2004; Peters et al. 2010; Rector et al. 2003; Sensky et al. 2000), social anxiety (Halperin et al. 2000; Kingsep et al. 2003), suicidal ideation (Bateman et al. 2007; Peters et al. 2010) and improving levels of self esteem (Barrowclough et al. 2006; Hall and Tarrier 2003; Knight et al. 2006; Laithwaite et al. 2007; Lecomte et al. 2008) and social functioning and recovery (Cather et al. 2005; Fowler et al. 2009; Granholm et al. 2005; Grant et al. 2012; Rector et al. 2003; Startup et al. 2004).

10.2.4 Client and Therapist Factors Affecting Outcomes

There is some evidence that client factors may affect the outcome of CBTp. An important finding for chronic and treatment refractory groups is that neither cognitive impairments nor low IQ are contra-indicated for CBTp (Garety et al. 1997; Granholm et al. 2008; Premkumar et al. 2011). However, CBTp is more effective in those with some degree of cognitive flexibility and/or cognitive insight at the start of therapy (Brabban et al. 2009; Garety et al. 1997; Naeem et al. 2008; Perivoliotis et al. 2010) as well as better coping skills (Premkumar et al. 2011) and functioning (Allott et al. 2011), and the presence of a carer (Garety et al. 2008). Perhaps not surprisingly, therapist factors affecting outcomes include training and competence in CBTp (Steel et al. 2012; Wykes et al. 2008), although not generic CBT skills (Durham et al. 2003). A good outcome is predicted by a good therapeutic alliance (Bentall et al. 2003) as well as having a longer course of therapy (Sarin et al. 2011) and better engagement with the therapy process (Dunn et al. 2012), which itself may be influenced by the client having a view of their problems as psychological in origin (Freeman et al. 2013).

10.2.5 Recommended National Treatment Guidelines

In summary, there appears to be a small, but clear effect size for CBTp on psychotic symptoms as well as depression. This evidence has led to national UK and US clinical guidelines recommending that CBTp is offered to all patients with a schizophrenia diagnosis (National Institute for Health and Clinical Excellence (NICE 2002, 2009); US Schizophrenia Patient Outcomes Research Team (PORT), (Kreyenbuhl et al. 2010). The current NICE guidelines (NICE 2009) recommends

delivery of CBTp on an individual basis, for at least 16 sessions over a minimum of 6 months and the NICE guidelines (2014) update will not be changing this.

10.3 Overview of CBTp

Given the scope of this chapter, we can only give an overview of CBTp and suggest that more interested readers refer to the comprehensive treatment manuals for detailed guidance on the practice of CBTp (Beck et al. 2009; Fowler et al. 1995; Chadwick et al. 1996; Kingdon and Turkington 1994, 2005; Morrison 2002; Steel 2013). In theory, CBTp progresses through the stages of engagement, assessment, coping, formulation, intervention and relapse prevention. However, in practice therapists may need to be highly flexible in order to meet changing needs and to keep the client engaged in the therapy process. There are specific interventions for working with hallucinations, unusual/delusional beliefs, reasoning biases and negative symptoms. As well as working with psychotic symptoms, the CBTp therapist is also likely to work directly with emotional distress. These will be covered in more detail in the sections below.

10.3.1 Therapeutic Approach

The therapeutic approach of CBTp is worthy of elaboration in order to help dispel some of the misperceptions that often perpetuate. CBTp is not necessarily focussed on getting rid of psychotic symptoms, nor is it about 'challenging' and changing the client's delusional beliefs in order to increase 'insight', nor a way of improving compliance with medication. These outcomes may all occur as indirect by-products of therapy, but are not the main focus of CBTp as they run the risk of, respectively, setting up unrealistic expectations of what therapy can achieve or of creating ruptures in the therapeutic alliance due to differences of opinion. In CBTp, the aims of therapy are more likely to be helping the client cope better with their experiences, alleviate distress and to work towards achieving client generated, specific behavioural goals that improve general functioning and social engagement. In CBTp, therapists may work 'within' the client's belief system; that is, not attempt to refute delusional beliefs if it would be detrimental to the client (e.g. if this were to have a significant impact on the client's level of risk, depression and/or self esteem), or to the therapeutic relationship. Some clinicians unfamiliar with CBTp may initially feel uncomfortable with this stance as they see themselves as colluding with a client's unhelpful beliefs if they do not explicitly state that they do not share these views. However, novice therapists who take too direct an approach or try to challenge a client's beliefs before a strong therapeutic alliance is formed, or before they have a clear understanding of the role played by the belief and implications of belief change, are likely to find this simply leads the client into defending, rather than changing, these beliefs. Instead, CBTp requires the therapist to maintain a neutral, non-judgemental, but genuinely curious style to create an environment that facilitates open discussion of the client's concerns, minimises

Table 10.1 Summary points about therapeutic style

A good therapeutic relationship is absolutely crucial, and all work in psychosis must be done within the context of the therapeutic relationship
General
Empathy, warmth, genuineness, listening skills
Use of person's terminology (avoid psychiatric jargon)
Offer structure
Need to be sensitive to
Mental state (apologise about yet another assessment, ask permission to take notes, check if voices are present, be aware of fluctuations)
Beliefs about therapist
Expectations (client's and your own)
Need to be flexible with
Structure and length of assessment
Contact (length of sessions, frequency)
Therapy demands (e.g. not everyone will manage homework or self-generated alternatives)
Style (from concrete to philosophical) depending on client
To facilitate engagement
Empathise whenever possible
Normalise whenever possible
Use of humour if appropriate
May need to give specific reassurances
Honesty (about yourself, role within team/service, what you can offer)
Agree goals
Build on existing strengths
To facilitate assessment
'Columbo' technique (see Fowler et al. 1995)
Be open-minded and interested
Take client seriously (regardless of content)
See client as reasonable, struggling to understand difficult experiences
Take non-committal stance if necessary
Persevere (keep going even if confused/overwhelmed, or therapy looks unlikely, or client hostile, etc.)
Aim to understand, not change
To facilitate intervention
Set goals
Need creativity
Be gentle (be prepared to back off)
Collaborative, not confrontational
Containment (don't over-arouse/elicit too much emotion, leave things till later)
Agree to differ (but your version not necessarily right)

conflict and reduces arousal, and allows the client to feel understood and that their concerns are taken seriously (see Table 10.1 and chapter by Johns et al. 2013, for further guidelines on the therapeutic approach).

10.3.2 Differences Between CBTp and CBT for Other Disorders

CBTp is the same as generic CBT in many ways: it is based on a collaborative partnership, uses Socratic questioning so the client is guided to find their own solutions to their problems, has structured sessions starting with agenda setting and encourages 'homework' tasks between sessions, and therapy is orientated towards agreed goals. However CBTp differs in that it requires the therapist to be much more flexible in approach. This may mean adjusting the content, level of complexity and pacing of sessions to the client's abilities and arousal levels; offering a choice of location and/or shorter sessions; giving the client more support in sessions (e.g. by gently 'floating' some suggestions if the client struggles to generate their own) and greater tolerance around session structure and homework (which may be difficult for some clients with psychosis to complete) as well as being prepared to move between the standard stages of therapy (e.g. offering some initial coping strategies early in therapy to facilitate engagement or deferring some assessment to later sessions). There may be a longer duration of assessment and therapy overall but smaller and/or more specific goals. Moreover, the therapeutic style in CBTp is significantly more tentative and empathic than in standard CBT given the increased fragility and sensitivity of these clients, and therapists must be acutely aware of changes in their client's presentation and be prepared to quickly back down or change tack, as well as to provide direct reassurance if the client is anxious or paranoid, in order to maintain a good working relationship.

10.3.3 Engaging Clients in Therapy

It is important in CBTp to start with a period of engaging the client to address therapy interfering issues that may be directly (e.g. voices, paranoia, thought disorder) or indirectly (e.g. hopelessness about the possibility of change, difficulty attending sessions) related to psychosis. Any paranoia may also include therapists and trust may be slow to gain. Voices may interfere with the therapy process through direct threats, making undermining comments or distracting the client (e.g. "don't speak to her ....you can't trust her"). Giving explicit reassurances to the client about your role early on in therapy can be helpful especially if the client has a tendency to incorporate clinical staff into any delusional beliefs. Similarly, directly asking about voices interfering will normalise this process to the client and demonstrate therapist experience in this area.

10.3.4 CBTp Assessment

The primary aim of a CBTp assessment is to gather sufficient relevant information to create an individualised, detailed formulation of the client's problems. In order for CBTp to be effective, therapists need to achieve a balance of both breadth of assessment so that vital information is not missed, as well as depth so that the

current symptoms of psychosis as well as other associated problems are understood in sufficient detail to make accurate hypotheses about the mechanisms that might be maintaining these problems. Information from clinical interviews can be supplemented by the judicious use of standardised assessment measures and self-report questionnaires selected to suit the client's needs and which allow for the tracking of progress over the course of therapy (e.g. PSYRATS; Haddock et al. 1999; CHOICE; Greenwood et al. 2010; CORE; Connell and Barkham 2007). Questionnaires can be given as between-session homework for some clients or completed together in the therapy sessions.

Given the complexity of problems in the majority of people with psychosis, the assessment phase of CBTp is likely to be longer than in standard CBT. However, a lengthy assessment stage can be frustrating to the client who is eager for change and who is overwhelmed by symptoms, so it is important that therapists are pragmatic. Assessment in CBTp is best conceptualised as an on-going process throughout therapy, and assessment of past personal history, factors around the onset of psychosis and previous relapses can be left until later sessions, if required. An initial focus on gaining a list of current problems is a good starting point, alongside developing 'SMART' goals for therapy (i.e. specific, measurable, achievable, relevant and time sensitive), which are best framed in terms of things the person would like to do rather than how they will feel. Keeping these goals in mind will help orientate therapy, as the key problems to work on should be those that are preventing the client from achieving their goals. Table 10.2 lists some useful areas to cover in assessments and readers are directed to the chapter on CBTp assessment by Peters (2010) for more information.

10.3.5 Formulation

The cornerstone of effective CBTp lies in the quality of the therapist's 'formulation' of the client's problems, i.e. what has led to these, what are the factors contributing to keeping these going and what needs to change. This formulation is at the heart of the therapy process as this will inform the selection of interventions. During assessment, eliciting recent, typical examples of the client's problem in terms of specific triggers, cognitions, emotional and behavioural responses will provide more useful information for CBTp than discussions about general patterns. Drawing simple diagrams of these examples in the sessions helps the client understand the CBT model, see how these factors interact and contribute to maintaining their problems as well as showing how these vicious cycles can be broken. Figures 10.1 and 10.2 show examples of vicious cycle, maintenance formulations for, respectively, paranoia and voices. These illustrate the range of possible interventions strategies that would be derived from these formulations.

These initial, maintenance formulations can be developed by adding in past, relevant life events, specific triggers, circumstances and emotions around the first onset, and tracking how these difficulties may have changed over time. However, it is important that sharing parts, or all, of a formulation is *only* done if helpful to the

Table 10.2 Areas for assessment in CBTp

Delusion specific
Content
Conviction, preoccupation, distress
Typical, recent, day to day examples
Triggers/thoughts/emotions/behaviours
Maintenance factors (including other psychotic symptoms, emotional processes, safety behaviours, environment, drug and alcohol abuse)
Meaning of belief (for self and others)
View of self without delusions (e.g. being persecuted may be better than being mad)
Consequences—impact on life
Circumstances around onset
Change over time (including adaptation to symptoms)
Develop hierarchy of distressing beliefs (if necessary)
Voices specific
Triggers—situational/temporal/emotional
Voice form—number of voices, frequency, duration, volume, location, language spoken, whether recognised, age and gender of voices, source
Voice content—positive/negative, specific examples, intrusive nature—culturally/personally unacceptable, commands
Beliefs about voices—identity, benevolent/malevolent, omnipotence (power, control, omniscience), metacognitive beliefs
Relationship with voice—subordinate? Inferior?
Behaviour—resistance/engagement, compliance, coping strategies
Typical, recent, day to day examples
Triggers/thoughts/emotions/behaviours
Consequences—Impact on life
Cause and origin (Where do they come from? What causes them?)
Psychosis specific
Cognitive biases (jump-to-conclusions, theory of mind deficits, attributional biases (i.e. personal, externalising bias)
Cognitive deficits (difficulties in concentration, memory, planning, ability to manage complex information)
Model of understanding
Person specific
Personal beliefs (e.g. religion)
Relationship with services
Social support and social relationships
Short- and long-term goals and plans
Core beliefs, dysfunctional assumptions and schemas (sometimes)
Life history (sometimes)
Secondary disturbances
Other emotional problems (low mood, anxiety, worry, intrusive thoughts)
Cognitive distortions (as found in depression and anxiety)
Look out for
Cognitive flexibility (i.e. greater openness to consider alternatives)
Strengths and resilience

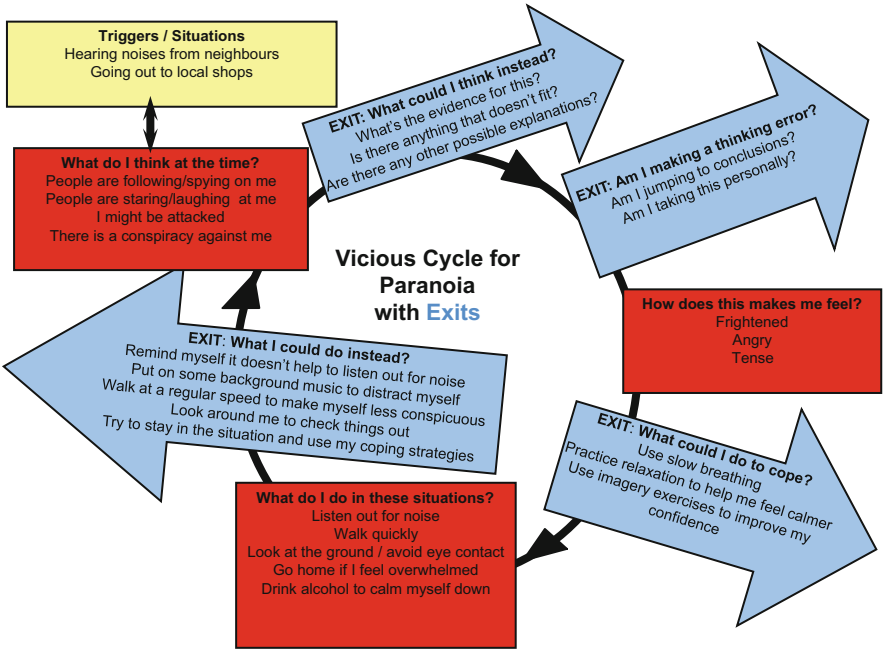

Fig. 10.1 Example vicious cycle for paranoia with possible interventions

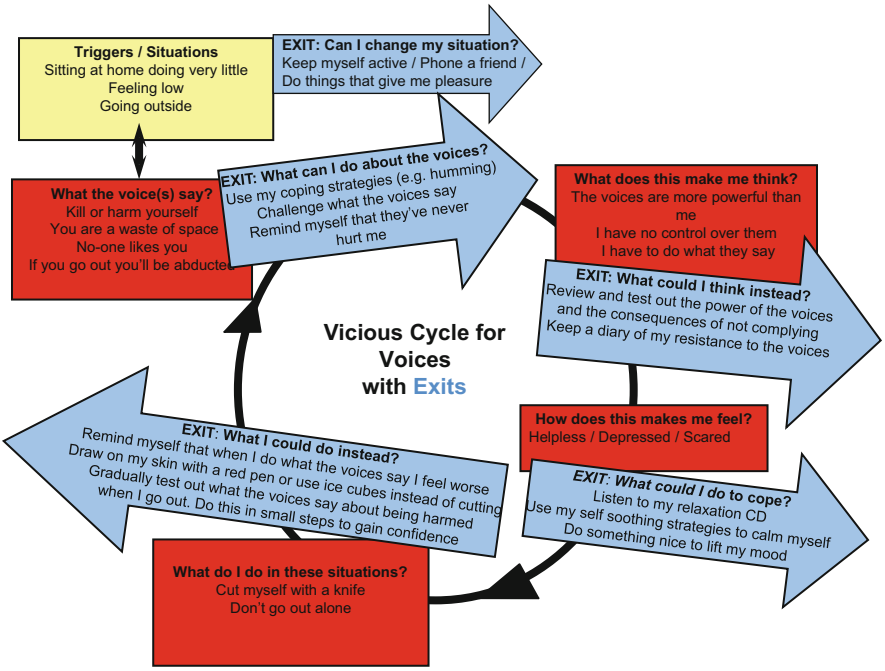

Fig. 10.2 Example vicious cycle for voices with possible interventions

client and by gathering feedback from the client. It is always better to err on the side of simplicity, as presenting overly complex formulations to clients can be unhelpful (Chadwick et al. 2003; Morberg Pain et al. 2008). In most cases the therapist keeps a comprehensive, detailed formulation for their own use, based on one of the cognitive models of psychosis (Bentall et al. 2007; Birchwood and Chadwick 1997; Freeman et al. 2002; Garety et al. 2001, 2007; Morrison 2001) and shares only the essential parts of this with the client.

10.3.6 Enhancing Coping Strategies

Early in therapy therapists can introduce coping strategies to help clients achieve some respite from, and a sense of control over, their symptoms. Many clients will already use some forms of coping, but often these are not used regularly, or for long enough, to be effective, or they can be counterproductive (i.e. they are functioning as safety behaviours). Building on these strategies in therapy can be helpful (Tarrier et al. 1990). Asking the client about when their symptoms are better (or if possible, asking the client to complete a diary where they rate this) and what they are doing at this time will allow for the creation of a coping strategy list. A shared analysis of why, and how, these strategies might be helping can lead to hypotheses about other possible coping strategies they might try and in this way the client's current coping strategies can be enhanced and supplemented. Coping strategies may include shifting attention from symptoms, relaxation, mindfulness and behaviours designed to self soothe and promote social support. New strategies should be practised in therapy sessions before trying them elsewhere. Regular use should be encouraged, so that clients become skilled and techniques become more effective. Clients can use a coping strategy diary where they note the effectiveness of each strategy by rating the severity of symptoms before and after use. Any success in coping with symptoms should be framed as an increase in the client's control to increase empowerment and counter hopelessness. Although coping strategies are often too effortful to be used all the time, an important outcome of their effective, even if occasional, use is to modify the person's beliefs about the degree of control they have over their experiences and power beliefs about their voices/persecutors (see below).

10.3.7 Working with Emotional Distress

The important role of emotional distress in not just the sequelae, but the formation and maintenance of psychotic symptoms, has been recognised (Birchwood 2003; Freeman and Garety 2003) and is included in all the main CBTp models (e.g. Bentall et al. 2007; Birchwood and Chadwick 1997; Freeman et al. 2002; Garety et al. 2001; Morrison 2001). Often working with distressing emotions is a good place to start as it is easier to find common ground, while the therapeutic alliance is formed. In addition, the techniques and strategies covered in this phase,

adapted from CBT for other disorders, especially anxiety and depression, will socialise the client to the process of CBTp in later work on psychotic symptoms. Furthermore, addressing emotional processes may also have a 'crab-like' effect on psychotic symptoms, e.g. decreased anxiety may lead to a reduction in voices and paranoia if it was acting as a trigger.

10.3.8 Working with Hallucinations

Most CBTp interventions with hallucinations have focussed on voices given their high prevalence in psychosis. It is helpful if clients can complete diaries at the start of this work to identify internal and external triggers for voices (such as negative emotions, social situations or isolation, drug/alcohol use) in order to intervene to modify these. Coping strategies that interfere with inner speech, such as reading aloud, humming or conversing appear most helpful and can be used to gain brief periods of respite. Therapist and client can work together to evaluate the *content* of the voices (in a similar way to reframing negative automatic thoughts in anxiety and depression) and the *interpretation* of the voice hearing. However it may take a while for the client to be ready to disclose the content of their voices, especially if it is highly distressing or perceived to be shaming. Psycho-education about the prevalence of these experiences (Johns et al. 2004; van Os et al. 2009), especially in situations of extreme stress, bereavement or sleep/sensory deprivation, is helpful in normalising the experience, and making links with the client's personal history, especially past experiences of psychological trauma, bullying and victimisation in order to reframe voices as re-experiencing phenomena, can be powerful to some clients. Similarly, discussions about other explanatory theories (such as misattributed inner speech) and psychological processes such as intrusive thoughts can offer alternative explanations (unless the content is too ego-dystonic, in which case it may be best to steer clear of such explanations).

Research into voice hearers' beliefs about voices (Chadwick and Birchwood 1994) has led to highly effective therapy protocols for voices (Chadwick et al. 1996) and for command hallucinations specifically (Byrne et al. 2006; Meaden et al. 2013). These approaches emphasise how working to reduce the perceived power of the voice is a key component of therapy, as this is an important predictor of distress (Birchwood et al. 2004; Peters et al. 2012a, b) and of acting on such commands (Hacker et al. 2008), together with beliefs about the voice's identity, intent and consequences of resisting (Brahan et al. 2004). Reducing motivation to comply with commands can be achieved by redressing the power imbalance between any voice(s) and the hearer. Therapy aims to increase the perceived control of voice hearer, weaken the conviction that the client is, or will be, punished, and weaken any unhelpful convictions about the identity of the voice as well as minimising the perceived omniscience and omnipotence of voices through the setting up of experiments to test out the voice's predictions, knowledge and threats. This approach also aims to alter the person's relationship with their voices. Voice hearers tend to be submissive to their voices and this is mirrored in their other social

relationships (Birchwood et al. 2000a). Higher levels of distress are found when the voice is perceived as having a dominant style of relating (e.g. bullying, critical, hostile) and the client has a submissive and distancing style of relating to voices (e.g. withdrawal) (Vaughan and Fowler 2004; Sorrell et al. 2010). This can be remedied by teaching the client to set boundaries with their voice, assertiveness training and working to improve the client's self esteem. Table 10.3 provides some summary points about working with voices (See Hayward et al. (2012) "Overcoming Distressing Voices" for a Useful Self-help Guide to Recommend to Clients).

10.3.9 Working with Unusual/Delusional Beliefs

There are many levels at which the therapist can intervene with unusual beliefs, all of which are potentially helpful. Although there may be some clients where CBTp can effect a complete change in the client's delusional belief system, therapy can still be deemed successful if clients achieve only partial change (e.g. maintain their delusional beliefs about the past but see the future as improved; perceive an increase in exceptions; or a reduction on the extent of the delusional beliefs) or maintain their delusional beliefs intact but achieve change to distress levels, preoccupation and behavioural impact. Before any direct work on delusions starts, it is important for the therapist to assess the implications of belief change with the client through questions such as 'If it were at all possible to find another explanation for what is happening, how would this make you feel?' For some clients changing their unusual beliefs may be more detrimental than maintaining them, as they might provide psychological protection (e.g. from past traumas), or it may be that the recognition of the impact their delusional belief system has had on their life leads to increased depression and suicide risk. With these clients, an emotional and behavioural change route is indicated. However, if cognitive work is undertaken, listing the advantages and disadvantages of belief change can increase motivation for looking at alternatives. Therapy can start to look at alternative explanations for small, specific day-to-day examples that are likely to be less challenging to the client. Highlighting and building on any inconsistencies or uncertainties that the client may already hold may facilitate discussion of alternative explanations. Therapists need to give clients space to consider their own alternatives, but can assist by proffering some tentative suggestions if clients struggle to generate alternatives (Freeman et al. 2004). If several beliefs need to be addressed, these can be organised into a hierarchy, and therapist and client can gently examine the evidence for and against each of these, starting with those held with least conviction. Behavioural experiments can be incorporated into this work, where the specific predictions derived from a thought, belief or assumption are directly put to the test and the outcomes evaluated. These can start out very small, may be conducted with the therapist and slowly build into a series of tests as the client increases in confidence. Behavioural experiments can be highly effective interventions but need careful, and collaborative, planning (see Bennett-Levy

Table 10.3 Summary points about working with delusions and voices

Delusions (and beliefs about voices)
Goals
Assess consequences of belief change carefully (e.g. grandiose delusions: meaning of life without belief/secondary gains?)
Do not push for change (evaluate advantages and disadvantages)
Aim for distress, preoccupation/interference over conviction
Aim for evidence for belief rather than belief itself
Work with hierarchies
Focus on maintenance cycles
Help person discover own best way of coping
Early on
Timeline (sometimes)
Psycho-education (stress-vulnerability model, cognitive model, information processing)
Normalisation (continuum of experiences, of cognitive biases)
Problem-solving
Coping strategy enhancement
Take the line of least resistance
Proceed to
Sharing formulations
Reframing (of day to day events, past events)
Behavioural techniques (e.g. graded exposure, distraction, relaxation, coping cards, etc.)
Cognitive techniques (e.g. Socratic questioning, adapting NAT thought records, alternative explanations (be prepared to float alternatives), de-catastrophise, working with continua, historical tests, data logs)
Metacognitive (cognitive biases, positive and negative metacognitive beliefs, e.g. positive beliefs about paranoia)
Reality-checking and behavioural experiments (modifying or dropping safety behaviours)
Voices
Coping strategy enhancement
Understanding negative cycle and triggers
Working with beliefs—power, control, omniscience, positive beliefs
Working with self-schema—bad me, poor me, social rank
Working with the relationship between the voice and voice-hearer
Working with attention
Working with command hallucinations
Working with illness model—normalisation
Working in groups—peer support, challenging stigma
General points
Work within client's model of understanding
Work with what is distressing, not what is abnormal
Don't rush
Promote homework
Often work with process rather than content
May need to work within delusion

(continued)

Table 10.3 (continued)

Delusions (and beliefs about voices)
Therapy often crab-like (e.g. targeting anxiety/worry may impact on delusion/voices without addressing psychotic symptoms directly)
Do not underestimate power of psychotic experiences (confirmatory evidence)
Always preserve the person's self-esteem

et al. 2004). Throughout all of this cognitive structuring work it is useful to ask the client for regular conviction ratings on the target beliefs to track change. For clients with 100% conviction, who are not able to tolerate contemplating alternative beliefs, therapy may focus instead on working to reduce emotional distress and disability. This may be through helping the client recognise the impact of their struggle on their emotional wellbeing, encouraging them to let go of the past and by increasing activities that fit with their valued goals *despite* their on-going situation. Table 10.3 presents some summary points about working with delusional beliefs (See Freeman et al. (2006) "Overcoming Paranoid and Suspicious Thoughts" for a Useful Self-help Guide to Recommend to Clients).

10.3.10 Working with Reasoning Biases

For many clients reasoning biases and/or metacognitive beliefs (beliefs about thinking; see Morrison 2002; Morrison et al. 2011) will be included in the formulation and will be addressed as part of the work on reframing unhelpful appraisals of experiences and reducing emotional distress. For some clients who present with examples of distressing events that are too numerous to be addressed individually, it is useful to notice the pervasive patterns of responding and to concentrate on working with these biases and metacognitive beliefs, rather than with specific content. Common reasoning and attentional biases in psychosis (Freeman 2007; Garety and Freeman 1999; Peters et al. 2013) include 'jumping to conclusions', hypervigilance, externalising attributional style and confirmatory bias. Therapists can normalise these biases, agree with the client that they may be useful *in some instances* (i.e. 'better safe than sorry'), use shared formulations to link over-usage and being overly inclusive to increased distress and help clients practise noticing their personal biases and problem solving ways to rectify these, such as by pausing and deliberately looking for alternatives. Effective, innovative computerised interventions have been developed to help clients in the recognition and re-training of reasoning biases such as 'jumping to conclusions' and an external attributional style (Moritz and Woodward 2007; Ross et al. 2011; Waller et al. 2011), again providing evidence for the usefulness of working at the 'process' rather than 'content' level for delusional beliefs.

10.3.11 Working with Negative Symptoms

Clients with negative symptoms often express cognitions about failure and hopelessness (Rector et al. 2005; Grant and Beck 2009) so it is important to set small, achievable goals in therapy to prevent confirming these predictions. Generating a list of pleasurable and rewarding activities with the client, and slowly but surely scheduling these into their routine is helpful. Moreover, it is important to identify, and address, negative and self-defeating cognitions and use problem solving to overcome obstacles to activity (Grant et al. 2012). Much of the work with negative symptoms will be similar to working with depression, although sessions may be shorter and the work may progress more slowly [approximately 50 short sessions over 18 months in the Grant et al. (2012) trial].

10.3.12 Relapse Prevention

Relapse prevention can be either a part of a longer course of CBTp or the main issue that is addressed in therapy. Clients differ in their early warning signs of relapse so much so that the term 'relapse signature' has been coined to highlight the individual nature of the pattern of symptoms. Many clients are adept at recognizing relapse indicators and therapy often simply involves formalizing this, with symptoms categorized into early, middle and late stages accompanied by appropriate actions at each of these stages. This work can be supplemented by looking at lists of common warning symptoms (Birchwood et al. 2000b). Moreover, for clients who have had multiple relapses, it is helpful to complete a timeline in sessions, where relapses are plotted on a graph with the various factors (e.g. situational, emotional, specific stressors, negative life events) that might have impacted on these relapses can be charted. This timeline can include periods where the client has stopped medication, which may help with compliance. If clients are willing, other people can be recruited to contribute to the relapse warning signs list. For all clients ending therapy, it is valuable to review progress and the techniques in therapy that have contributed to any recovery and to compile handouts, shared formulations and worksheets into a folder for them to keep.

10.4 Recent Developments in CBTp

10.4.1 Innovations in the Delivery of CBTp

There have been several interesting developments in the delivery of CBTp in recent years. A series of brief intervention studies targeting specific, common problems in the context of chronic persecutory beliefs [i.e. worry (Foster et al. 2010; Freeman et al. 2012); insomnia (Myers et al. 2011); and emotional processing (Hepworth et al. 2011)] have found positive results not only for the target symptoms but for the persecutory beliefs too. Although these studies are small, they provide evidence for

the 'crab-like' approach advocated by the original CBTp manuals (e.g. Fowler et al. 1995). Waller et al. (2013) have also piloted targeted, manualised interventions of graded exposure to feared situations (for anxious avoidance) and increasing activity levels for those with depression in psychosis, with good results. It is hoped these interventions will enable significantly more patients to access help, as these interventions can be carried out by front-line clinical staff in routine practice, under supervision.

A growing body of evidence is highlighting the prevalence and potential causal role of childhood and/or adult trauma in clients with psychosis (Mueser et al. 2004; Read et al. 2005; Varese et al. 2012; Hardy et al. 2013). It has been suggested that unrecognised, and untreated, post-traumatic-stress disorder (PTSD) symptoms may contribute to treatment refractory psychosis given the potential interactions between the two disorders, leading to the development of integrative models (Morrison et al. 2003; Mueser et al. 2002; Read et al. 2001; Steel et al. 2005). Emerging evidence from early research trials in the USA using CBT to treat residual trauma symptoms in clients with psychosis is promising (Frueh et al. 2009: Mueser et al. 2008), and European trials are just out (van der Berg & van der Gaag, 2012) or underway (Steel et al. 2010; de Bont et al. 2013).

Third wave or contextual approaches, such as mindfulness and person-based cognitive therapy (Chadwick et al. 2006, 2009) and Acceptance and Commitment Therapy (ACT; Bach and Hayes 2002; Morris et al. 2013), have similar goals to CBTp i.e. disrupting the associations between the presence of psychotic experiences and their emotional and behavioural sequelae, thereby changing the way people relate to their distressing experiences. However the 'road-map' to achieving these changes is different between CBTp and third wave approaches. Contextual therapies deemphasise the importance of changing the nature and content of difficult experiences, using instead acceptance and mindfulness processes to help people disentangle from difficult thoughts and feelings in order to facilitate engagement in behavioural patterns that are guided by personal values (Hayes et al. 2011). This contrasts to more traditional cognitive approaches in which interventions might target the meaning of thoughts or appraisals in order to reduce distress and increase functioning.

Compassion Focused Therapy (CFT) was developed specifically to build the capacities to experience compassion in high shame and self-critical individuals (Gilbert 2010). There is preliminary evidence that it can help people with psychosis (Braehler et al. 2012). Again the goals are similar to CBTp, i.e. reducing threat and distress, but the road map is different: CFT specifically aims to reduce shame, stigma and self-blame by helping people to 'self-soothe'.

Conclusions

To conclude, there is evidence for modest but significant effects for CBTp; newer trials assessing psychological outcomes rather than a symptom reduction focus have found larger effect sizes. Therapeutic techniques targeting psychotic experiences need to be implemented within the context of a good therapeutic

relationship and derived from a formulation (preferably developed in collaboration with the client). Recent developments are targeting specific psychological mechanisms, such as emotional processes and reasoning biases.

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