Talking Therapies

A brief review of recent literature on the evidence of the use of cognitive behaviour therapy, dialectical behaviour therapy and motivational interviewing; on cultural issues in therapies and on the therapeutic alliance.

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New Zealand Guidelines Group
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The National Centre of Mental Health Research
and Workforce Development

‘Talking therapies is a broad term covering a range of therapeutic approaches, all of which involve talking, questioning and listening in order to understand, educate and assist with people’s problems.’ [n]Peters (2007a)

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Executive summary

Objectives: clinical questions

This report aims to answer five key questions about psychotherapy nationally and internationally.

1. Describe the evidence for the use of cognitive behaviour therapy (CBT) in mental health and addiction services and populations.
2. Describe the evidence for the use of dialectical behaviour therapy (DBT) in mental health and addiction services and populations.
3. What evidence is there of the use of DBT, CBT and motivational interviewing (MI) in New Zealand in minority cultures (specifically with Māori, Pacific and Asian peoples) and its outcomes in these settings and with these cultural groups?
4. What evidence is there for the effectiveness of MI as a process of engagement for:
   a. people who use addiction services?
   b. people who use child and adolescent mental health services?
   c. people who use adult mental health services?
5. What evidence is there to suggest that an effective therapeutic relationship is critical to a positive clinical outcome for people who use services?

These questions were asked by Te Pou o Te Whakaaro Nui, The National Centre of Mental Health Research and Workforce Development (Te Pou).

Review methods

A systematic search was made of PsychInfo and Medline for reviews and trials which met criteria. A further hand search was made for appropriate theoretical, epidemiological and narrative papers. All cited papers were subjected to the evaluation found in Appendix A. Each citation in the body of the report carries a superscript annotation referring to this evaluation. An example of search terms is found in Appendix B.

Results

Question 1: Cognitive behaviour therapy

Depression and anxiety disorders, such as generalised anxiety disorder and panic, respond well to CBT. There is some pressure to use CBT with other disorders. However, there is less robust evidence for other disorders such as the anxiety symptoms in schizophrenia, relapse prevention for bipolar disorder, substance use disorders, children's obsessive-compulsive disorder and the anxiety disorders. Cognitive behaviour therapy is recommended neither for the eating disorders, except for some evidence that it can be helpful in bulimia nervosa, nor for psychotic symptoms.

Question 2: Dialectical behaviour therapy

Dialectical behaviour therapy research has not produced strong evidence for its efficacy although this may be due to a lack of suitable studies. The best evidence is for decreasing the incidence of parasuicidal behaviours particularly in people with borderline personality disorder.

Question 3: Minority cultures

No research that meets criteria was found in the literature search that could throw light on which psychotherapy works with New Zealand's Māori, Pacific or Asian populations.

Question 4: Motivational interviewing

Evidence suggests that motivational interviewing (MI) is a suitable short term intervention for the substance use disorders, particularly within the alcohol domain. It can be used on its own as a one-session intervention or in combination with other therapies such as CBT. Evidence shows that MI can enhance engagement in the substance area and in medication adherence in chronic mental health.

Question 5: The therapeutic relationship

Evidence for the importance of the therapeutic alliance as an integral part of all psychotherapies including CBT, DBT and MI is found in the literature. The strength of the therapeutic alliance predicts outcomes.

Conclusions

This report reflects current evidence-based thinking while falling short of a full systematic review.

Cognitive behaviour therapy is a well researched psychotherapy. Generally, it is as good as any other psychotherapy and better than some, given that no psychotherapy is universally superior to any other. Dialectical behaviour therapy research is being

published and, if the trend continues, will soon be an evidence-based psychotherapy. At the present time, it has evidence of efficacy for people with borderline personality disorder, particularly those who display parasuicidal behaviours. Motivational interviewing is well accepted as an intervention in substance use disorders either as a stand alone therapy or an adjunct to other psychotherapies. Its use is being trialed in other areas where behaviour change is required.

A problem of those who review the literature is the lack of suitable studies that meet criteria for inclusion. Confirmation of this problem is the dearth of studies examining New Zealand Māori, Pacific or Asian responses to psychotherapy.

The therapies examined in this report (CBT, DBT and MI) are available in New Zealand, although not everywhere. However, even though these three therapies fare well in the review, they are not the only efficacious therapies that can provide quality care. Most well conducted studies that compare *bono fide* therapies find little or no difference between therapies overall. This has led to research exploring what common factors are inherent in all *bono fide* therapies. So far, one of the more significant results of this research points to the importance of the therapeutic alliance. As more of this type of research gets published, the questioning of the efficacy of specific therapies (as discussed in this document) may give way to the identification of common and efficacious aspects of therapies in a more generic way.

1 Introduction

The following is an evidence-based report built around five questions proposed by Te Pou involving the psychotherapies cognitive behaviour therapy (CBT), dialectical behaviour therapy (DBT) and motivational interviewing (MI) plus a search for the effectiveness of these therapies in Māori, Pacific and Asian populations in New Zealand and the relevance of the therapeutic alliance literature. As a result of the publication of two previous reports largely anecdotal in nature ([n]Peters, 2007a and [n]2007b), the series of five questions were to be answered by evidence from national and international literature.

The overall aim of Te Pou in this report and in the reports already published is to increase access to evidence-based therapies for service users. Training for the three therapies chosen for this review (CBT, DBT and MI) is available in New Zealand and the therapies themselves are accessible for some, although not all, service users at the present time ([n]Peters, 2007a). This report is part of the background framework needed for implementation of evidence-based practice across services and groups.

[n]Peters (2007a) suggested that CBT and MI were well accepted therapies practiced in New Zealand, but not freely enough available to appropriate services. She recommended training become accessible to all suitable staff as these therapies could be considered to include those therapy skills needed to deliver quality evidence-based care. This report was commissioned to test these conclusions against the evidence published nationally and internationally.

The report concentrates on clinical research that is applicable to New Zealand conditions but mentions comparison psychotherapies where appropriate. As requested, the papers reviewed are mostly post-2000, although the availability of quality papers is dependent upon the psychotherapy reviewed. Papers involving systematic reviews and meta-analyses were given priority followed by randomised controlled trials (RCTs) in an appropriate clinical area to isolate evidence-based illustrations of best therapeutic practice. The review is produced without prejudice or any conflicts of interest by the New Zealand Guidelines Group.

2 Methods

PsychInfo and Medline were searched for RCTs, systematic reviews and meta-analyses. This search was supplemented by a hand search for appropriate narrative papers. Each evidence paper was evaluated according to the schedule in Appendix A. Any paper not fitting this evaluation, such as theoretical papers and epidemiology studies, was marked ‘n’.

An example of search terms can be found in Appendix B.

Each question was treated differently depending upon the available literature. Question 1 on CBT had to be restricted primarily to systematic reviews and meta-analyses from 2007 and 2008 due to an overwhelming number of suitable and available-as-full-text publications from the libraries of either the Wellington Medical School or the University of Auckland. The other questions included as many systematic reviews and meta-analyses as were published and available primarily from 2000, plus RCTs and a few papers providing less stringent evidence, all of which are noted in the text.

3 Clinical Questions

Question 1

Describe the evidence for the use of cognitive behaviour therapy in mental health and addiction services and populations

Cognitive behaviour therapy is based on an integration of various behaviour therapies, the earliest dating from classical learning theories of the beginning of the twentieth century and several cognitive therapies developed mid-century. Although only 20 years ago CBT was rarely reduced to its acronym (e.g. in the influential book Cognitive Behaviour Therapy for Psychiatric Problems: A practice guide, 1989) and was a theoretical stance that gave rise to practice rather than a specific set of techniques, it rapidly became associated with a few prominent psychologists, became less relaxed and eventually manualised. Manualisation of therapies has many effects beyond keeping therapists true to what is recommended. One effect on CBT has been its concentration on specific aspects of behaviour therapy and/or cognitive therapy. During the process of CBT becoming a therapy in its own right rather than a homogenisation of behaviour and cognitive therapies, the freedom to apply any of the behavioural and cognitive techniques as the situation demanded was lost. On the other hand, CBT has become popular and evidence for its efficacy has increased, resulting in the incorporation of aspects of other quite disparate therapies traditionally outside the domains of behaviour and/or cognitive therapy. For instance, psychodynamic principles that have recently become integrated into CBT include the notion of helplessness, the divergence between the self and the ideal self, and the avoidance of thinking about painful thoughts ([1]Roth and Fonagy, 2005). Modern CBT was devised for research and, arguably it is now the most researched psychotherapeutic technique in existence and probably the most broadly based.

Cognitive behaviour therapy is built on the theoretical stance that what a person makes of an event is more important than the event itself. The person's take on what has happened is largely based upon deep seated beliefs that originated years in the past. Cognitive behaviour therapy teaches skills in questioning belief systems and facilitating understanding that reduces distress ([1]Roth and Fonagy, 2005). It is the focus of the training of clinical psychologists in all training units in New Zealand universities, and is thus the most widely practiced therapy clinically in this country. This is in contrast to other countries where psychodynamic orientations and CBT are equally practiced, for instance in the US. To continue this comparison, psychodynamic therapies are more difficult to research and thus the evidence for CBT outweighs it, at least in volume. Yet, in a recent US survey of clinicians in the eating disorder area, few were purely CBT or psychodynamic therapists with only 13% identifying

themselves with one theoretical orientation. Just over half of the 13% identified themselves as CBT therapists ([n]Tobin et al., 2007). The majority of clinicians used a combination of techniques drawn from a more generalised training: an eclectic approach.

Both cognitive therapy and behaviour therapy (not to be confused with CBT) are available in New Zealand. Even though CBT has not been validated for use with minority cultures as yet, CBT is the treatment usually encountered when consulting a psychologist in New Zealand ([n]Kazantzis, 2006).

In the CBT literature, reference is made many times to interpersonal therapy (IPT). This therapy was devised about the same time as CBT by psychologist Gerald Klerman and is based theoretically on the works of HS Sullivan, a neo-Freudian. While IPT has different origins and a different theoretical foundation to CBT, there are many similarities between the two therapies. Both are manualised, have a therapy format and techniques aligned with social-learning-based therapies, and are short-term therapies. Both were developed for depression but have now been adapted for use with many other Axis-I diagnoses. Both have been validated (indeed, both CBT and IPT are integral to the recommendations of the 1996 [1]New Zealand guideline on depression and the [1]National Institute of Clinical Excellence (NICE) (2004) guideline on depression,) for use with similar diagnoses and finally, few if any differences have been found in the efficacy of both approaches. CBT is available in New Zealand; IPT, one of the common therapies in Europe and North America, can be found in a few centres in New Zealand but appears to be growing in availability ([n]Peters, J 2008 pers. comm.).

Mental health

Mood disorders

The 2007 [1]NICE guideline on depression recommends brief CBT, problem solving therapy or counselling for mild to moderate depression. With severe depression or for those who relapse, they recommend a combination of antidepressants and longer term CBT or the psycho-dynamically based IPT. The upcoming New Zealand guideline on the identification of common mental health disorders and the management of depression in primary care ([1]New Zealand Guidelines Group, 2008) makes similar recommendations with an emphasis on CBT.

[1]Ekers et al. (2008) in their systematic review and meta-analysis / meta-regression of randomised controlled trials (RCTs) of behaviour therapies in depression questioned the NICE guideline. Their work found that behaviour therapy is superior to control conditions, supportive counselling and brief psychotherapy. Importantly, they found that behaviour therapy had equivalence to both cognitive therapy outcomes and those of CBT, as recommended by NICE. There were no differences in symptom improvement, recovery levels and drop-out rates between the three therapies. This type of equivalency is discussed in more detail under Question 5 below.

[1]Vittengl et al. (2007) conducted a meta-analysis of studies that provided a continuation of CBT after the acute phase of a major depressive episode. They found that 54% of those treated only in the acute phase would relapse or have a recurrence

of their depression. However, with a continuance programme, 21% of these relapses could be prevented. This translated to the need to treat four to five such people with a continuance programme to prevent one from having a relapse or recurrence.

A danger with depression, as with other diagnoses, like the eating disorders, is suicidal behaviour. [1]Tarrier et al. (2008) performed a systematic review and meta-analysis asking the question whether CBT could reduce suicidal behaviours. Overall, the answer was that CBT reduced suicidal behaviours, but with some caveats. It was effective in adult samples but not adolescent samples and when delivered by a therapist individually, but not in a group setting. It was only effective when suicidal behaviour was the primary symptom and focus of the treatment. Cognitive behaviour therapy was more effective than treatment-as-usual or no-treatment controls but no more effective than any other active treatment. These authors complained of a publication bias (the circumstance where editors are more likely to publish successful rather than unsuccessful trials, thus giving a false impression of effectiveness) which tempered their optimism about CBT. They ask the question about what aspects of treatment are common and effective in various therapies. This question is discussed in Question 5 below.

Cognitive behaviour therapy can be delivered in several new ways. A meta-analysis by [1]Gellatly et al. (2007) teased apart factors that determine effectiveness in self-help interventions for depression. They found that effective self-help interventions were based on CBT and not just the psycho-education part of CBT (other psychotherapies were not in this meta-analysis) and were ‘guided’ with a modicum of professional input. Those studies that did not provide at least some contact with a therapist were found to be unsuccessful.

Anxiety disorders

A meta-analysis of CBT studies of generalised anxiety disorder by [1]Covin et al. (2008) showed that the cardinal symptom, pathological worry, can be treated successfully with CBT. The largest gains were in younger clients. [1]Honot (Cochrane Review, 2007) also found that CBT was effective in reducing symptoms in generalised anxiety disorder in the short term. Too few studies met criteria to compare other therapeutic approaches with CBT, a problem many reviewers note.

A meta-analysis by [1]Norton and Price (2007) of CBT trials across a variety of anxiety disorders showed that either cognitive therapy or exposure therapy (a specific aspect of behaviour therapy), alone or in combination, or one of those combined with relaxation therapy were efficacious treatments over the anxiety disorder spectrum. Social anxiety did respond well to treatment generally and both generalised anxiety disorder and post-traumatic stress disorder responded particularly well. CBT was clearly superior to wait-list controls with a cautious recommendation that relaxation-only treatments may have the same effects as CBT. Another meta-analysis by [1]Siev and Chambless (2007) examined relaxation therapy and CBT for two anxiety disorders, generalised anxiety disorder and panic without agoraphobia. They found that for generalised anxiety disorder, both relaxation therapy and CBT produced equal results while for panic disorder, CBT was clearly superior.

[1]Bisson et al. (Cochrane Review, 2007) did a systematic review and meta-analysis of psychological treatment regimes for chronic post-traumatic stress disorder (PTSD). They concluded that results from trauma-focused CBT and eye-movement desensitisation and reprocessing (EMDR, a therapy designed for PTSD) were superior to other therapies, but not different from each other.

The self-help movement is growing. In [n]Farvolden et al.'s survey of 1161 users of a CBT-based web intervention for panic disorder and agoraphobia, they found an extremely high attrition rate (only 12 completers from 1161 users) even though they had good results for the twelve who stayed the course. If the attrition rate could be controlled, having a web-based treatment is, arguably, a way for home-constricted agoraphobics to receive treatment, especially, it could be speculated, if some therapist contact was provided ([1]Gellatly et al., 2007).

Eating disorders

A series of systematic reviews of RCTs in the area of eating disorders has recently been published by a team from the University of North Carolina. The [1]Bulik et al. (2007) systematic review could find only weak evidence that CBT may help adults with anorexia nervosa and then only after they had regained lost weight. Adolescents responded best to family therapy. The [1]Brownley (2007) paper on binge eating found that behavioural treatments had moderate strength when CBT was in combination with medication. This regime was shown to reduce bingeing but it did not lead to weight loss, an important client goal. [1]Shapiro's (2007) systematic review on bulimia nervosa suggested that evidence for efficacy of both CBT and IPT was strong. However, drop-out rates were noted to be high. The research group criticised the quality of research in the area.

Psychoses

Several Cochrane systematic reviews mention CBT in severe mental illness. The review by [1]Jones et al., (2004) concluded that CBT, even though widely used, does not reduce relapse or readmission rates in schizophrenia, but may have some effect on reducing hospital lengths-of-stay. [1]Cleary et al. (Cochrane review, 2008) concluded that there was no compelling evidence for any psychotherapy over any other to improve mental state or to reduce substance abuse in the 50% of those with schizophrenia who abuse alcohol or drugs. This review looked at studies comparing various psychotherapies (motivational interviewing, CBT, case management and skill training) with treatment-as-usual.

[2]Lawrence et al. (2006) systematically reviewed the CBT literature for use in groups of people with schizophrenia. Only five studies met inclusion criteria and their results indicated some improvement in symptoms of social phobia and depression in those with schizophrenia. One psycho-education intervention reduced both positive and negative symptoms but the authors call for further investigation.

[1]Zaretsky et al. (2007) did a systematic review of recent literature (1999–2006) looking for studies meeting a set of strict criteria using psychotherapy in bipolar disorder as an adjunct to medication. The aim of psychotherapy in bipolar disorder is

primarily to impart information and improve adherence to medication, reduce substance abuse, enhance attitudes to better health, help recognition of prodromal symptoms and promote lifestyle regularity. Several of these goals were met by CBT (mostly psycho-educational in aim, but with some other CBT components) ranging from CBT for euthymic individuals with residual symptoms to targeting dysfunctional affective symptoms in the acutely ill. Other psychotherapies found to be effective as well as CBT were IPT, family therapy and psycho-education alone.

[1]Beynon et al. (2008) also systematically reviewed and meta-analysed psychological treatment for bipolar disorder. They again stated that pharmacotherapy was the primary treatment for bipolar disorder but CBT, family therapy or group psycho-education may be effective in preventing relapse. They found that there was a lack of published evidence that care management or integrated group therapies were effective. They concluded that, like so may other reviewers, there was no evidence that favoured one psychosocial intervention over another. Because of this equivalence, they suggested that new research should concentrate on which components of successful interventions are most efficacious.

Older people

In a small Cochrane review, [1]Wilson et al., (2007) found that CBT was more efficacious than a wait-list control for depression in older people. In other studies, where CBT was compared to psychodynamic therapy, neither was found to be superior to the other.

A meta-analysis of RCTs in older adults with depression ([1]Pinquart et al., 2007) found that CBT and reminiscence therapy had large effect sizes, and psychodynamic therapy, psycho-education, physical exercise and supportive therapies had medium effect sizes, although more studies were needed to make this a strong statement about efficacy. They found that major depression was more difficult to treat with CBT or any other psychotherapy making their recommendation specific for mild to moderate depression. They found that depression of any severity that was co-morbid with cognitive or physical problems was also difficult to treat. They tentatively concluded that there were no age effects in depressed adults between 60–80 years of age. Effect sizes were smaller when the comparison treatment was an active one due to non-specific treatment effects.

[1]Hill and Brettle (2005), in their systematic review of the psychological treatment for older adults, concluded that treating anxiety and depression with ‘talking’ therapies was efficacious in improving well-being. In contrast to [1]Pinquart et al. (2007), they found that the presence of co-morbid physical disease did not interfere with efficacy. CBT had the strongest evidence available for anxiety and depression. The authors complained about the lack of studies examining other therapies (e.g. IPT, other psychodynamic and client-centred therapies), although they found, in the few studies comparing these with CBT and with each other, outcomes were not significantly different.

Children and adolescents

Until recently, meta-analyses or systematic reviews in the area of children's mental health have not been as available as those for adults. In a current meta-analysis ([1]Watson and Rees, 2008) that looked at paediatric obsessive compulsive disorder (OCD), both medication and CBT showed some efficacy in relieving symptoms. The authors pointed out that more recent trials did not show the large effects of earlier trials for either CBT or medication. Nevertheless, these two approaches were the only efficacious treatments for paediatric OCD in the literature. [1]O'Kearney et al. (Cochrane Review, 2006) reported that behaviour therapy alone, or in combination with CBT, gave the same outcomes as medication for treating OCD in children or adolescents. When the psychological therapies were received in conjunction with medication, results were superior. However, results were not statistically significantly better when medication was added to an existing programme of behaviour therapy with CBT.

The meta-analysis of [1]Ishiwawa et al. (2007), which was restricted to RCTs of CBT, found that the effect sizes were moderate (0.68) compared to a placebo effect size of 0.42, indicating that CBT can be considered beneficial in childhood anxiety disorders. In a Cochrane review, [1]James et al. (2005) looked solely at CBT for anxiety disorder in childhood and adolescence and argued that CBT is moderately effective in comparison to no-treatment controls with about half responding satisfactorily to treatment. They argued for more therapeutic development to increase effectiveness. [1]Cartwright-Hatton et al. (2004) performed a systematic review of CBT as a treatment for child and adolescent anxiety disorders and concluded that CBT is potentially useful for children over the age of six. They expressed concern that over a third of children finished treatment with their anxiety diagnosis intact. They also pointed out that little is known about the efficacy of other treatments. Although there were a plethora of studies, they found that the quality of reporting was generally weak.

[1]Klein et al.'s 2007 meta-analysis of adolescent depression noted that over the years, effect sizes of RCTs of CBT have decreased and confidence intervals become smaller as [1]Watson and Rees (2008) found in the obsessive-compulsive literature. They attributed this to several factors, not the least of which are the methodological differences over time. In spite of the decrease in efficacy of CBT, these authors found that it was still an effective treatment. [1]Taylor and Montgomery (2007) performed a systematic review asking the question whether CBT could increase self-esteem in adolescents who were depressed. Out of 265 studies, only two met inclusion criteria. A tentative conclusion from these two papers is that CBT may increase both global and academic self-esteem when compared to wait-list controls.

A meta-analysis by [1]Spielmans et al. (2007) compared behavioural and cognitive therapies including CBT, specifically CBT compared to non-CBT, either bona-fide therapies or non-bona-fide therapies, for child and adolescent anxiety and depression. Results indicated that CBT was more efficacious than non-bona-fide therapies, but equal to other bona-fide non-CBT therapies (see the discussion in Question 5 below) and the full CBT manualised version of CBT did not convey anything extra over using components only. Their conclusion was that theoretically-driven purportedly critical ingredients of CBT do not ameliorate child and adolescent anxiety and depression specifically. [1]Chu and Harrison (2007) did both a systematic review and a meta-analysis on RCTs which examined CBT for anxiety or depression in the child and

adolescent literature. They found that CBT produced consistent results for theory-specific variables in anxiety with moderate to large effects and was linked to cognitive change in depression, although the effects were small. Cognitive behaviour therapy in depression had non-significant effects for behavioural and coping variables.

Substance abuse

[2]Lee and Rawson (2008) published a systematic review of various CBT interventions for methamphetamine dependence. They found that psychotherapies were effective in reducing dependency on the drug, with CBT and contingency management (a behavioural treatment using operant conditioning that uses positive reinforcement) both efficacious. [1]Dutra et al. (2008) recently meta-analysed various psychosocial treatment regimes for a variety of substance use disorders. They found that poly-drug users responded poorly and opiate and cannabis users had the highest effect sizes. Analysis of their second question – Which treatment is most efficacious? – showed that contingency management had the highest effect sizes followed by relapse prevention and various forms of CBT. Two studies combined CBT and contingency management and had high effect sizes.

[1]Denis et al. (Cochrane Review, 2006) found that both CBT and motivational interviewing (see Question 4) could be efficacious in treating cannabis abuse and / or dependence but refused to draw solid conclusions from their literature review. They concluded that treating cannabis dependence by psychotherapy is difficult.

Overview studies

Cognitive behaviour therapy is mentioned often in the series of clinical practice guidelines produced by the Royal Australian and New Zealand College of Psychiatrists. It is recommended in panic disorder and agoraphobia ([1]Andrews, 2003), in bipolar disorder ([1]Mitchell, 2004) in conjunction with medication (also recommended is psycho-education), schizophrenia ([1]McGorry, 2005) in conjunction with medication (also recommended are family interventions, vocational rehabilitation and other forms of therapy), and in depression ([1]Ellis et al., 2003) as equally effective as antidepressants or interpersonal therapy. CBT is not recommended in self-harm ([1]Boyce, 2003) or anorexia nervosa ([1]Hay, 2004) except as a weak recommendation along with other psychotherapies after the recommended family therapy and dietary advice.

The conclusions that [1]Roth and Fonagy (2005) reached in their careful and extensive review of psychotherapeutic approaches were that CBT was the treatment of choice for a number of diagnostic categories, usually as efficacious as one or more other major types of psychotherapy. The disorders examined included depression (CBT was as effective as IPT), social phobia (as effective as exposure therapy alone or in combination; but CBT without exposure was not effective), generalised anxiety disorder (as effective as relaxation therapy), panic disorder with or without agoraphobia (as effective as exposure therapy or panic control treatment – a specific non-CBT therapy developed on cognitive and behavioural principles), PTSD (as effective as eye movement desensitisation and reprocessing), bulimia nervosa (only in conjunction with dietary management; as effective as IPT for bulimia) and sexual

dysfunctions (as effective as exposure therapy). There was no strong evidence for the efficacy of CBT for dysthymic disorder, bipolar disorder, specific phobias, obsessive-compulsive disorder, anorexia nervosa, binge-eating disorder, schizophrenia, personality disorders, alcohol abuse, cocaine abuse or opiate abuse ([1]Roth and Fonagy, 2005).

Few adequate randomised controlled trials for children's disorders have been done according to [1]Roth and Fonagy (2005). A weak recommendation was made for using CBT in childhood obsessive-compulsive disorder, generalised anxiety disorder and conduct problems.

Summary

In the majority of systematic reviews and meta-analyses, CBT is recognised as an important therapeutic option that consistently produces results that are superior to a no-treatment control condition. Other therapies that are as efficacious as CBT include behaviour therapy, IPT and the psychodynamic therapies in various reviews. Because CBT is the treatment regime taught in New Zealand universities, it is more available than other therapies, but that is not to say that it is superior to them other than being applicable for a wide range of disorders.

Key points

- That the evidence is strong for the use of CBT in the following diagnostic categories:
  - depression (all age groups although the best evidence is for younger adults)
  - anxiety disorders such as generalised anxiety disorder and panic
  - adapted CBT for PTSD.
- That some evidence is available (but of lesser strength) for the use of CBT in the following diagnostic categories:
  - schizophrenia (for anxiety-like symptoms only)
  - bipolar disorder (for relapse prevention only)
  - children's anxiety disorders and OCD
  - substance use disorders (weak recommendation after contingency management and brief therapies like MI)
  - eating disorders (some evidence for bulimia only).

Question 2

Describe the evidence for the use of dialectical behaviour therapy in mental health and addiction services and populations.

Dialectical behaviour therapy was developed to address parasuicidal behaviours in women with borderline personality disorder (BPD). In mental health, BPD is the most commonly diagnosed of all the personality disorders ([2]Trull et al., 2000). Symptoms often become apparent in adolescence and extend into adulthood resulting in the most wide-ranging functional impairment of all personality disorders (social impairment, problems in school or work environments, psychiatric problems and aspects of anti-social behaviour). Borderline personality disorder is associated with romantic entanglements that result in conflict, u Borderline personality disorder unwanted pregnancies, abuse and a dissatisfaction with quality of life for years in the future. Typically, symptoms of BPD are co-morbid with Axis-I diagnoses such as substance-use disorders, and mood and anxiety disorders ([n]Chanen et al., 2007).

Borderline personality disorder predicts involvement with mental health services for ten to twenty years following the appearance of first symptoms ([n]Chanen et al., 2007). It is commonly found as a co-morbidity in the mental health services, primarily in women but also found extensively in both genders in New Zealand prisons ([n]Simpson et al., 1999). Increasingly, research is providing evidence that when BPD is co-morbid with an Axis-I disorder, treatment is more difficult, more prolonged and after improvement, relapse is more likely ([2]Trull et al., 2000). [3]Kroger et al., (2006) described their inpatient BPD population as having an average of 6.2 lifetime axis-I disorders and 5.5 current disorders on admission. Because a diagnosis of BPD is pejorative, psychiatrists can be reluctant to make the diagnosis ([2]Tyrer and Mulder, 2006).

Borderline personality disorder is strongly associated with the substance abuse diagnoses. [2]Trull et al.'s review (2000) found that an average of 57.4% of BPD participants in 26 studies had a substance abuse diagnosis co-morbidly. Looking at it from the other side, 27.4% (up to 65.1% in in-patient samples, [3]DeJong et al., 1993) of people seeking help for their alcohol or drug abuse or dependency were diagnosable with BPD. With prevalence rates such as these, the co-morbidity of substance abuse or dependence with BPD is a highly important factor when selecting treatment options ([2]Trull et al., 2000).

Borderline personality disorder is associated with violence in young adulthood ([n]Chanen et al., 2007). In the mental health survey of New Zealand prisons, 21–28% of prisoners were diagnosed with BPD, with no difference in rates of male or female prisoners ([n]Simpson et al., 1999), in contrast to studies from mental health services where BPD is over-represented by women ([2]Trull et al., 2000). Borderline personality disorder was the main statistical predictor of having a lifetime Axis-I disorder in the prison study. Prisoners met criteria for an average of 1.8 Axis-I diagnoses outside of the substance abuse spectrum, largely major depression, post-traumatic stress disorder and the phobias ([n]Simpson et al., 1999).

Almost all people with BPD have one or more other co-morbid personality disorders ([3]de Jong et al., 1993), but BPD produces such an extent of personality dysfunction and disorganisation, that it matters not which other disorders the person displays, as disability from the BPD tends to swamp the effects originating from the other personality disorders ([2]Trull et al., 2000).

People with BPD have a chronic, debilitating mental health problem, exacerbated by co-morbidities. BPD is ubiquitous in our mental health system, the addiction services and, indeed, our prisons. People with BPD require and deserve specialist help.

Dialectical behaviour therapy (DBT) is a specialised form of cognitive behaviour therapy (CBT) originally designed by Linehan in the latter part of the twentieth century to address the problem of self-harm/suicide in women with BPD ([1]Linehan, 1993). As suicide attempts or self-injurious behaviour where the aim is not suicide (together known as parasuicide) is characteristic of a diagnosis of BPD ([n]Feigenbaum, 2008), the therapy rapidly became known as a viable intervention for people with BPD, people who were often considered to be untreatable by mental health staff ([4]Wolpow, 2000). Originally, Linehan described DBT as cognitive behaviour therapy with additional skills group treatment. Dialectical behaviour therapy includes aspects of mindfulness therapy (an intervention that emphasises being fully aware of what is happening in the here-and-now) and strict guidelines for contact between therapist and client. The term 'dialectical'[1] within DBT means accepting these multi-disordered people totally while encouraging them to change, treating them for their co-existing multiple tensions, challenging faulty thought processes and behavioural styles with an emphasis on targeting specific behaviours and teaching techniques for managing emotional trauma ([2]Linehan et al., 2002; [n]Miller et al., 2002).

Dialectical behaviour therapy provides a delicate balance between the need for change and validation of the individual who has a need to be fully accepted (one of the dialectical dilemmas). Too much focus on change in a person with BPD predicts dropping out of treatment. In combined mental health and substance abuse treatment centres a dropout rate of 80% included a large proportion of BPD clients ([2]Bornovalova et al., 2007).

The majority of published studies illustrate promising results that can occur after a group has undergone DBT (e.g. [4]Prendergast & McCausland, 2007, [3]Kroger et al, 2006). These studies were mostly prospective, small-n, uncontrolled, clinical time series and had not compared what happened in DBT to another treatment or treatment as usual. One such New Zealand study noted that their participants decreased their borderline symptoms, anxiety and depression, hospitalisation days and a global severity measure over time with a recommendation that the DBT programme could be implemented within existing mental health services ([4]Brassington & Krawitz, 2006). The notable exception to this plethora of uncontrolled studies is the work by Linehan herself and colleagues.

[1] This is defined as a method of argument or exposition that systematically weighs contradictory facts or ideas with a view to the resolution of their real or apparent contradictions.

Mental health

[1]Tarrier et al.'s (2007) meta-analysis of suicidal behaviours found that DBT and CBT were equally efficacious in reducing hopelessness and short term suicidal behaviours. They had no way of knowing whether either treatment reduced completed suicides, although [1]Crawford et al. (2007) did not find any evidence that having treatment after an episode of self-harm prevented completion of a suicide at some later date.

[1]Verheul et al. (2003) studied BPD patients who came from a variety of referral sources and who were assigned to DBT or continued with treatment-as-usual. Retention was better for DBT and it had marginally significantly fewer suicide attempts ($p = 0.06$) with their more severe clients producing markedly significantly fewer. As well, over the latter six months, significantly fewer DBT participants had self-harming episodes. Their conclusion was that DBT was particularly efficacious for parasuicidal behaviours and should be extended to all people with severe problems in this area, whether or not they formally meet BPD diagnostic criteria.

[2]Bohus et al., (2004) used DBT in an inpatient programme with good clinical results. Their control group was a 'wait-list' receiving non-specific treatment in the community, a group which showed no improvement four months after the beginning of the three-month programme. Those who received DBT significantly reduced psychopathology on 10 of 11 measured variables plus decreased the incidence of self-harm significantly. On a general measure of psychopathology, 46% of the DBT participants had clinically recovered.

[2]Turner (2000) compared community mental health outpatient clients who had originally presented with a suicide attempt and who were assigned randomly to either DBT or client-centred therapy. The DBT clients improved more than those receiving client-centred therapy on ratings of depression, self-harm, anger, ratings of the brief psychiatric rating scale (a general measurement of mental health) and number of hospitalisation days.

[2]Muehlenkamp's (2006) review of interventions for non-suicidal self-injurious behaviours (the non-suicidal part of parasuicide) postulated that DBT's success in reducing these behaviours depended upon the therapeutic alliance (understanding, respect and validation) that was fostered by the programme, along with the acquisition of cognitive-behavioural skills. In support of this, [2]Turner (2000) reported that client ratings of the therapeutic alliance were correlated with clinical improvements. The Clinical Guidelines of the Royal Australian and New Zealand College of Psychiatrists report that DBT 'appears to confer most benefits' when compared to other treatments for deliberate self-harm ([1]Boyce et al., 2003).

Alcohol and drug

[2]Linehan et al. (1999) randomly assigned women with BPD and drug dependence to either treatment-as-usual or DBT. They followed the women for 16 months to find that the DBT group had significantly reduced their drug intake (as evidenced by urinalysis), maintained their involvement with their treatment and produced greater gains in social adjustment at follow-up.

[1]Van den Bosch et al. (2002) compared standard DBT with treatment-as-usual in a group with BPD who were with or without co-morbid substance use problems. All participants significantly reduced symptoms associated with BPD compared to the control group although the problems with substances did not significantly improve. Linehan had developed a modification of standard DBT to specifically address the problem of co-morbid substance use disorders. Their small uncontrolled study showed 'promising' results ([n]Dimeff et al., 2000).

[2]Linehan et al. (2002) compared the adapted form of DBT with comprehensive validation therapy with 12-step follow-up, a variant of the ubiquitous non-professional substance abuse treatment originally devised by Alcoholics Anonymous. Their results were mixed. Dialectical behaviour therapy only retained 64% of their participants but they did better on 12 and 16 month follow-ups. The other therapy retained all, but the last four months of the programme saw increased drug use. By 16 months, both programmes showed their participants were reporting significantly fewer symptoms of psychopathology generally.

Forensic

[n]McCann et al. (2000) described adaptations to standard DBT for a forensic population of multi-problem clients who had a propensity for violence and had multiple diagnoses. [3]Evershed et al. (2003) applied this adapted DBT when they compared a small group of forensic BPD men in a high security hospital who were given the DBT treatment in addition to treatment-as-usual. The control group received treatment-as-usual only. Those receiving DBT improved more than the comparison group in reducing the seriousness of violence and hostility and various aspects of anger.

[2]Nee and Forman (2005) described a small forensic pilot study of female prisoners with BPD; 30 were assigned to DBT (with 14 completers) and 8 to a wait-list control group. Improvements were noted in the areas of impulsivity, locus of control and emotional regulation, all with moderate effect sizes. Improvements were also seen in self-esteem and dissociation. No significant overall changes were found in the control group.

Children and adolescents

[n]Miller et al. (2002) described an adaptation of standard adult DBT for multi-problem and suicidal adolescents that incorporated aspects of family therapy. There was some preliminary evidence that having families involved in the DBT treatment of the youngsters enhanced attendance in the programme. [3]Katz et al. (2004) compared two in-patient adolescent mental health units, one of which provided DBT and the other treatment-as-usual which had a psychodynamic orientation. All participants had parasuicide histories. Dialectical behaviour therapy significantly reduced 'behavioural incidents' but both treatments successfully reduced depression, suicidal ideation and parasuicidal behaviour at one-year.

In general

[4]Koons et al. (2006) found that clients who had DBT and were referred for vocational rehabilitation (58% BPD but all with a personality disorder of some sort) at six months follow-up had significantly more hours worked in gainful employment than those who dropped out.

The [1]Binks et al. (2006) Cochrane review described DBT as ‘experimental’ without the numbers yet to be a recommended treatment for those with BPD. However, DBT and a psychoanalytic treatment were the only therapies singled out as potentially helpful amongst those assessed. They concluded that more well-designed studies are needed before any recommendation can be made with any confidence.

Summary

There are few systematic reviews of the DBT literature, because too few qualifying studies have been published. As so often is stated at the end of systematic reviews, more research is needed, and more research by independent observers to supplement and corroborate the word by Linehan and colleagues. This new research must be of sufficient quality that it meets criteria for inclusion in the systematic reviews of the future. Nevertheless, evidence at hand shows promise for DBT eventually becoming recognised as a viable method of achieving change in a group of people notoriously difficult to either engage with or derive benefits from therapy. No other treatment specifically aimed at BPD is available in New Zealand.

At this stage, DBT is a promising treatment that targets parasuicidal behaviours for both adolescent and adults, particularly those with BPD. It seems to decrease the psychopathology associated with BPD with weak evidence that it can increase retention in therapeutic programmes.

Key points

- Evidence at hand shows promise for DBT eventually becoming recognised as a viable method of achieving change in a group of people notoriously difficult to either engage with or derive benefits from therapy.
- That consideration be given that data provided by clinical use of DBT in New Zealand be collected and analysed to better evaluate its impact on outcomes.
- That DBT is considered to be able to decrease the incidence of parasuicidal behaviours.

Question 3

What evidence is there of the use of dialectical behaviour therapy, cognitive behaviour therapy and motivational interviewing in New Zealand in minority cultures (specifically with Māori, Pacific and Asian peoples) and its outcomes in these settings and with these cultural groups?

In spite of the fact that Māori are over-represented in mental health statistics ([n]Oakley Browne et al., 2006), no appropriate systematic reviews, meta-analyses or RCTs using 'Māori AND motivational interviewing', 'Māori AND dialectical', Māori AND CBT' or Māori AND cognitive' search criteria were found in Medline or PsychInfo. The search was repeated with 'Pacific' substituted for 'Māori' and again no appropriate papers were discovered. An information specialist did a further search of other data bases and again no appropriate studies were found.

It can be assumed that clinical studies from New Zealand will most likely have included minority cultures and, indeed, studies often mention ethnicities in their description of participants, but differential effects of the various therapies used with people from these cultures have not reached the scientific literature.

The Royal Australia and New Zealand College of Psychiatrists produced a series of guidelines published as papers in the Australian and New Zealand Journal of Psychiatry in and around 2004 covering most of the major diagnostic categories. These guidelines were produced with Māori (and Australian minorities') input and sanctioned by a Māori Mental Health Manager. Yet, Māori, Pacific or Asian differences in response to treatment were not mentioned.

The results of this literature search confirm the assertion by [n] Peters (2007a) that little research has been done that draws conclusions about how the various psychotherapies affect the Māori, Pacific or Asian New Zealand populations.

Internationally, a similar picture emerges. [2]Ward's systematic review (2007) of depression in racial and ethnic minority women in the United States found that few RCTs exist that provide statistical analysis of minority women. Recommendations from the few surveys he found included the advice that standard treatment must be tailored to meet specific needs.

Key points

- The results of this literature search confirm the assertion by Peters (2007a) that little research has been done that draws conclusions about how psychotherapy affects the Māori, Pacific or Asian New Zealand populations.
- That future psychotherapy research is encouraged to examine the viability of the various psychotherapies for different ethnic groups (e.g. Māori, Pacific and Asian populations) in New Zealand.

Question 4

What evidence is there for the effectiveness of motivational interviewing as a process of engagement for:

- **people who use addiction services?**
- **people who use child and adolescent mental health services?**
- **people who use adult mental health services?**

Motivational interviewing (MI) is an intervention technique widely used in the substance use services. It purports to help people recognise and actively deal with problems that are preventing change. It assists the person to become committed to change as well as to develop a plan of action so that change is actually possible ([n]Solomon & Fioritti, 2002). Because of the ambivalence and doubt that exist inherently within a person with substance use problems, any programme that helps the person desire a change is going to be popular. Moreover, MI is the archetypal 'brief intervention' in the alcohol and drug treatment areas, which can take as little as one session. In addition, it is easily combined with other treatment options. It is perhaps understandable that brief interventions are the most valued interventions both amongst clinical raters and the clinical population ([2]Miller and Wilbourne, 2002).

Miller developed MI after finding that a control group who were handed a self-help manual and kindly encouraged to cut down on their drinking had similar results to an intervention group given a bone fide therapy. He replicated this study twice before he had to admit that the findings were real. The next replication after that used two control groups neither of which had any therapist contact. The differences in the two groups was significant, as he had expected. It was only then that he appreciated that the 'control' groups in his first studies were actually receiving a brief intervention that produced results equal to the more extensive intervention he was testing ([n]Miller, 1996).

Motivational interviewing is defined as 'a directive, client-centred counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence' ([n]Miller, 1996). The 'style' part of the definition means the warmth and empathy displayed by the therapist while using techniques like key questioning and reflective listening that are integral to client-centred therapies upon which MI is based. The five principles basic to MI are: 'express empathy, develop discrepancy, avoid argumentation, roll with resistance, and support self-efficacy', arguably all aspects of handling an interview well ([n]Miller, 1996).

'Express empathy' means reflective listening as delineated by Carl Rogers more than fifty years ago. A client's resistance is viewed as normal and expected. 'Developing discrepancy' means that the therapist gets the client to voice the problems associated with the current behaviours around alcohol or other substances and his or her personal values. The therapist never overtly asks for change nor advocates for it. The third principle, 'avoid argumentation' means a therapist never opposes the client's resistance, but uses reflective listening skills and accepts and flows with the expressed ambivalence. 'Self-efficacy' in MI literature means confidence in being able

to successfully change. This factor is important in predicting future drug and alcohol use. In practice, most MI is combined with a feedback procedure which segues into the possibilities for change according to the client, although this is more properly an adapted MI ([1]Burke et al., 2003).

Motivational interviewing is most frequently used at initial contact with a potential client to enhance engagement in the services offered, working under the axiom that if a client is engaged in treatment, the possibility of making changes exists. MI has been mostly used in addiction services from whence it originated, but also in mental health services to enhance engagement there.

The therapist encourages the client to express reasons for change and reinforces these reasons. The therapeutic alliance is based upon the partners, i.e. therapist and client, figuring out together how to get where they both want to be, while acknowledging the client's freedom of choice and responsibility for him/herself.

Addiction services

[2]Miller and Wilbourne (2002) reviewed controlled clinical trials containing interventions for alcohol disorders. They found that the strongest evidence of efficacy was for brief interventions including MI which Miller himself developed. The other efficacious brief interventions were social skills training, the community reinforcement approach, behaviour contracting, behaviour marital therapy and case management. Interventions not supported by evidence included those which confront clients, foster insight, educate or shock clients. A recent Cochrane review ([1]Kaner et al., 2008) found that brief intervention (including MI) in primary care men is associated with significant reduction in alcohol consumption, although because few studies included women, younger people and minorities, the power is too low to make accurate conclusions for these other groups.

[1]Rubak et al. (2005) published a meta-analysis and systematic review of general MI studies. After analysing 72 RCTs from 1991, the meta-analysis showed significant effects over a wide variety of outcomes (addiction, weight loss, blood pressure, alcohol and cholesterol – most of which involved life-style changes, but with the notable exception of cigarette smoking) with three out of four studies showing significant effects. Psychologists, psychiatrists, physicians and general practitioners were able to use this technique more successfully than other health care workers such as dieticians, nurses or midwives (success rates of 80% vs 46%) perhaps suggesting a training or experience component, or more sophistication in the application of the intervention.

Although MI was manualised, [n]Amrhein et al., (2001) pointed out the need for flexibility. Usually MI was combined with the model known as the Trans-theoretical Stages of Change ([n]Prochdka & DiClemente, 1982) for assessing the commitment of the client before instituting a plan for the future. When a client gradually became more committed to change over the course of the MI session, a good result could be expected. However, when commitment decreased at the end of the session, a poorer result could ensue. This required careful monitoring of the client's natural language ([n]Amrhein et al., 2001).

[1]Dunn et al., (2001) reviewed MI literature in the substance domain. They concluded that there was good empirical evidence that MI could both enhance response to treatment-as-usual or act as a stand-alone brief treatment. Because the MI intervention was very brief (three styles averaging 70, 98 and 104 minutes of therapist contact time in comparison to other interventions that ranged from 20 hours to 28 days) it appeared to be cost effective.

[1]Burke et al.'s meta-analysis of MI studies (2003) found that the effects of MI did not fade significantly over time with alcohol-use participants. On average, the improvement to be expected was approximately 80% of a standard deviation of the target outcome measurement. This translated into a doubling of abstinence rates from 20% to 40% and an overall reduction of drinking by 56%. They looked at MI as both a stand-alone and an adjunct to other therapies, and good results were recorded for both.

[1]McKee et al. (2007) compared CBT with CBT enhanced by an MI introductory session for cocaine abuse or dependence. Both treatment regimes were equally efficacious in reducing use of cocaine. Although the MI-enhanced CBT clients worried more that they would be able to maintain abstinence, they were more engaged, participated in more sessions during their treatment and at follow-up, reported more hope for abstinence and expected success more than those who received ordinary CBT.

Mental health

Consumers of mental health services are often ambivalent about their association with the services. Compliance can be compromised if people are disaffected and then clients do not reap the full benefit of treatment. Such a scenario predicts the continuation of symptoms. [3]Humfress et al. (2002) compared the effects of an MI session to those of a psychiatric assessment session of similar length to see if motivation for engagement could be increased. Although symptoms were not different between the groups before or after this brief intervention, clients were more motivated about their care and more positive about their consultations after one MI session.

A study conducted in Thailand by researchers from London's Institute of Psychiatry found that in comparison with treatment as usual an 8-session nurse-delivered combination of MI and CBT they call 'adherence therapy' successfully improved attitudes and satisfaction with medications in people with schizophrenia along with an overall decrease in psychotic symptoms ([2]Maneesakorn et al., 2007).

[1]Zygmunt et al. (2002) systematically reviewed the literature on medication adherence in people with schizophrenia, a constant problem when symptoms become chronic; usually, by the end of the first year of treatment, medication adherence was down to only 50%. This increased the likelihood of relapse which could be severe and dangerous. The review looked at specific interventions to help with the adherence problem as well as more general interventions and concluded that those including MI showed promise, as did those using problem solving. Motivational interviewing was a feature of the most successful programmes.

[1]Bellack et al. (2006) used an MI-based intervention to address the problem of dual diagnosis in those with severe mental disorders. US statistics say that almost 50% of people with schizophrenia and 56% of people with bipolar disorder (i.e. those with a severe and persistent mental illness) have a lifetime diagnosis of substance abuse. These people were characterised as having more severe disease, more frequent relapses and a poorer outcome compared to those without substance abuse histories. They also were described as more violent, more often homeless and they committed suicide at a higher rate. The authors compared a behavioural therapy regime that included MI with a group discussion treatment and found that the behaviour–MI programme was significantly more efficacious in keeping the clients engaged in treatment as well as cutting down on drug abuse.

Adolescents

Heavy episodic drinking by youth is an international problem with 41% of young people admitting to imbibing five drinks or more at a sitting within the past month ([1]Monti et al., 2007). [1]Monti et al.'s study showed that a one-session MI at the accident and emergency department had lasting effects. Over the next year fewer heavy drinking days, fewer drinks per week, and fewer total drinking days were experienced by those with the MI intervention than by those randomly assigned to receiving feedback only at their emergency visit. Twice as many youth in the MI arm reliably reduced the volume of alcohol they were drinking. Likewise, [1]White et al. (2007) showed that long term follow-up of student drinkers showed a small positive change in the group who received an MI intervention compared to the group who received a written feedback intervention. The MI group was significantly more successful in curbing number of drinks per week and frequency of alcohol intake.

[1]Carey et al.'s large (over 13,000 participants) meta-analysis (2007) of interventions in student alcohol abuse concluded that the factors of success were face-to-face and individual treatment using MI and personalised feedback information. This combination predicted greater reductions in alcohol-related problems. Although significant effects on curbing drinking were immediate, they rarely lasted more than six months in these young people.

[2]Peterson et al. (2006) conducted a randomised controlled study of homeless youth in the US (average age 17) comparing a half hour MI (10 minutes to 70 minutes) with control groups of assessment-only or assessment-and-follow-up-assessment-only. Over 80% of participants had experience with substances: alcohol (98%), marijuana (98%), amphetamines (83%) and hallucinogens (85%). Almost half had experience of heroin (47%) and other opiates (66%) plus a variety of other drugs. Alcohol and marijuana use were unaffected by the intervention, but the MI group significantly reduced their usage of other illicit drugs. The authors concluded that a brief intervention like MI is eminently suitable for a population that is notoriously hard to reach. They hypothesised that MI facilitated a natural process towards moderation. Motivational interviewing with its brevity and cost effectiveness seemed to be an intervention suited to these young people who do not seek help and have an intense distrust of authority figures.

This same research group ([1]Baer et al., 2007) looked at homeless youth again, this time blending the MI intervention more actively with current interventions. The average age of this group was just under 18 years. Their findings were less robust than the previous Peterson (2006) study, perhaps because of the amendments to the protocol or perhaps due to the vagaries of this mixed population which is notoriously difficult to treat.

[1]Tait and Hulse's (2003) systematic review of studies looked at adolescents by substance use type and the effectiveness of brief interventions. They concluded that brief interventions had a small positive effect on alcohol consumption in adolescents, a very small effect on tobacco use. It may have a substantial effect when the adolescent abuses multiple substances although evidence on this was from only one study of 39 youth.

In general

[1]Hettema et al. (2005) summarised 72 papers in a meta-analysis of studies that had a MI component that included a post-treatment outcome measure. Thirty-one studies were in the alcohol field; 14 were drug abuse studies, 6 smoking, 5 HIV/AIDS, and the remainder from a variety of other domains. They concluded that the delivery of MI had substantial impact on outcomes and the strongest evidence for MI was in the alcohol and drug areas, for which it was originally designed. However, one other area stands out: large effects were obtained for MI in treatment adherence, engagement and retention. They noted that MI was particularly successful with clients who were more angry and resistant and less efficacious when clients were ready to change their behaviours, perhaps because there was less room for improvement. They also noted that the strength of commitment at the end of the MI session predicted success, more so than that measured at the starting point.

The chapter by [2]Zweben and Zuckoff (2002) in Miller and Rollnick's book on MI reviewed a number of studies which mentioned the question of adherence. They complained that many of these studies were inadequate or uncontrolled and looked at adherence as an after-thought or an add-on. But most studies showed moderate to good improvements in attendance at interventions and their completion. The authors were 'cautiously optimistic' that a brief MI would soon be shown to help in the area of adherence.

Too many studies and indeed reviews involving MI are by Miller and/or his group, comparable to the frequency of studies in DBT by Linehan and her colleagues. As [n]Luborsky (1999) pointed out, if the authorship is comparing an 'own brand' psychotherapy with another, the reader can predict, in 92% of cases, the 'own brand' will be judged superior ([1]Roth and Fonagy, 2005).

[1]Roth and Fonagy's (2005) extensive review concluded that brief interventions are as effective as longer therapies (especially noting CBT, IPT and the 12-step programmes) in alcohol intervention across all levels of severity. They go on to say that there is little evidence that in-patient care is any better overall than treating people in the community. The therapies they deem effective include MI, contingency

management, coping skills and cue management. Motivational interviewing is not mentioned in their sections on cocaine or opiate abuse.

Summary

Given its brevity, MI appears to be remarkably effective in engaging people into making therapeutic change. Most of the evidence comes from the substance abuse domain, particularly alcohol, but there is growing evidence about its applicability in mental health, particularly in schizophrenia and bipolar disorder where it can aid in engagement, adherence and retention. Motivational interviewing can be used as a stand-alone treatment but increasingly is an add-on to more conventional and longer term treatment where it appears to add value. Motivational interviewing seems to have a strong therapist component that affects potency of the intervention. Trained and experienced alcohol and drug / mental health professionals get better outcomes than other professionals. The only evidence with children and youth is in the substance use domain where MI is seen as a suitably brief intervention with youth who have drinking or multi-drug problems.

Key points

- Motivational interviewing is a suitable intervention in the substance use domain, particularly with alcohol, with all age groups including youth, either as a stand-alone therapy or as a value-added component
- Motivational interviewing can be used in conjunction with CBT to enhance engagement in mental health
- Motivational interviewing is suitable for use with people with psychotic illnesses to enhance adherence

Question 5

What evidence is there to suggest that an effective therapeutic relationship is critical to a positive clinical outcome for people who use services?

The various psychotherapies discussed in this paper including DBT, CBT and MI embody the assertion that the therapeutic alliance is crucial to success, and it is a vital part of their intervention. The relationship between client and therapist is one of the foundations of therapy and the only places where it is ignored are the therapies available on internet or through self-help manuals.

Over the years various systematic reviews and meta-analyses have noted that the so-called 'dodo bird effect' is firmly in place. The dodo bird effect refers to an incident in Alice in Wonderland where a 'race' was held within an enclosure and competitors are told to rush around or not as they deemed fit, and the end result was that 'everyone has won and all must have prizes'. The dodo effect was proposed in the 1930s to illustrate the strange finding that psychotherapy was effective in relieving symptoms. as was testified by myriad comparisons to non-treatment control groups, but collectively and experientially no bono fide psychotherapy was clearly superior to any other. There were small differences in various domains, as noted above, but overall

and in spite of huge differences in theoretical underpinnings and practical applications of the interventions most bona fide interventions work. This appears true even with the ever increasing sophistication of statistical examination, innovation and manualisation. Many meta-analyses, including the careful work by Wampold et al. (1997) have agreed. This unpopular observation has persisted to the present day. [n]Stiles et al. (1986), in one of their earlier papers, pointed out that solutions to the dilemma this has produced have been proposed, including the belief that when we get more sensitive measurement devices, differences will become apparent. That had not happened in 1986 and has not happened yet. Others have proposed that all psychosocial interventions most probably have a common core of processes. Following this thought, [n]Luborsky et al. (2002) suggested that therapist effects were a major part of the success of psychotherapy no matter which intervention is being followed (see their paper titled 'The Dodo Bird Verdict is Alive and Well – Mostly', the title conveying their main conclusion).

Latterly, [n] Stiles et al. (2002) have claimed that the most written-about and measured concept in psychotherapy is therapeutic alliance. The original thinking was done by [n]Bordin (e.g. 1994) who described three constructs implied by the term:

1. the bond between therapist and client
2. mutual agreement about what the intervention was to achieve, (i.e. the goals)
3. mutual agreement about how the intervention was to proceed, (i.e. the treatment tasks).

Others have widened this list in attempts at delineating an elusive concept and this thinking has spurred the development of many different styles of measurement instruments ([n]Stiles et al., 2002).

[1]Martin et al. (2000) did a meta-analysis of the therapeutic alliance literature. They concluded that when the results of these measurement instruments were analysed with outcomes, the effect of therapeutic alliance was moderate but consistent across studies and across observers (clients, the therapists themselves and observations by independent raters). Overall, they concluded that the strength of the therapeutic alliance was predictive of outcome ([1]Martin et al., 2000).

A study done by [1]White et al. (2007) found there were few differences in the short term between two groups of student problem drinkers: one group was handed a feedback sheet about their drinking and its possible consequences and the other group discussed the same type of feedback with a therapist using MI. However, as reported above, in the long term the effects of the therapist-assisted interview significantly reduced drinking, giving yet a bit more evidence that even with a brief intervention of only one session, the presence of a therapist makes a positive difference.

There are some indications about how to identify a therapist who is capable of fostering good therapeutic alliance. [n]Beutler (2006) found that therapists with a better level of personal adjustment themselves had better outcomes. [n]Huppert et al. (2001) in a study of therapist differences in their applications of a manualised CBT programme found that the greater the number of years of experience a therapist had,

the better the outcome. This was true even if their previous experience had not been with CBT. Another attribute associated with greater therapist experience is having a significantly lower rate of drop-outs from therapy in mental health settings, a finding from a meta-analysis done by [1]Stein and Lambert (1995). [n] Stiles et al. (1998) found that alliance ratings from the later stages of therapy predicted outcome better than ratings taken earlier in therapy. This, in itself, proved to be a methodological problem. As Stiles et al. (1998) said, 'Forming and maintaining a relationship characterised by bond, partnership, confidence, openness and initiative could plausibly be considered as a positive outcome as well as a means of psychological treatment'.

[n]Moyers et al. (2005) attempted to find causal mechanisms for why MI works and suggested the fostering of the therapeutic alliance was a good contender. They found that effective therapist alliance was associated with cooperation and involvement; this finding consistent with Miller's stance (and his commitment to Rogerian client-centred therapy principles) that therapist empathy and genuineness was integral to MI, not just a side issue. These aspects of the handling of the session by the therapist purportedly developed a strong working alliance, even if the extent of the MI was only one session.

Therapeutic alliance is a difficult area to measure. Many extraneous factors can influence outcome measurements and every measurement scale of therapeutic alliance is multi-factorial without necessarily having much overlap ([1]Roth and Fonagy, 2005). More importantly and unfortunately, strengthening the therapeutic alliance is not something the therapist can arbitrarily decide to do as it is largely out of the therapist's control ([n]Stiles et al., 1998). There are indications that training may help and somewhat better indications that years of experience help, but until therapeutic alliance can be put into a theoretical framework, alliance more consistently measured and large studies performed, improving therapeutic alliance for effective interventions must remain a theoretical possibly without evidence.

[1]Chue (2006), in his review of schizophrenia and satisfaction published in a pharmacology journal, pointed out that the goals of treatment in schizophrenia have switched from a concentration on controlling psychotic symptoms by medication to an emphasis on the importance of the quality of life of these people. In order to improve quality of life, Chue contended that clients needed to take their prescribed medication. He noted that in order to achieve compliance with the medication regime, a good therapeutic alliance was needed between the client and the therapist who was delivering the prescribed psychosocial interventions. He concluded that both pharmacology and the psychosocial interventions combine to predict more satisfaction with life for people with schizophrenia.

There appears to be a growing trend towards eliminating the therapist altogether and using the computer for delivery of some or all of a psychotherapy intervention ([n]Marks et al., 2007). [1]Christensen et al. (2004a) authored an Australian RCT which looked at depression ratings after either a computerised CBT intervention or a computerised psycho-education intervention. Both interventions were clearly superior to the control group in reducing symptoms, again with very little difference between the overall depression ratings of the two intervention groups. However the differences between a human-controlled research study and internet computerised treatment may be

massive in a practical way. [n]Farvolden et al. (2005) noted that 98.9% of registered users of a computer-based CBT intervention for panic disorder freely available to the public did not complete the programme. Attrition this high implied that having no therapist reduces effectiveness to the point of negligibility. [n]Marks et al. (2007) suggested that clinicians were needed to enhance adherence to the programme even if the contact is brief. It appeared that the quality of the contact could be important. [1]Kenwright et al. (2005) found that scheduled phone calls compared to client-initiated phone calls significantly enhanced adherence to a difficult set of homework assignments, and indeed, ultimately improved OCD symptoms in treatment-resistant clients using a computer-based self-help programme.

A meta-analysis published by [1]Gellatly and colleagues (2007) looked at factors that determine effectiveness in self-help interventions. Their main conclusion was that the addition of a therapist, albeit briefly, made the intervention effective. This is known as ‘guided’ self-help. [1]Kaltenthlaer et al. (2004), in their systematic review of studies (not all RCTs) which looked at efficacy of computerised CBT in comparison with various controls, pointed out that the area is insufficiently researched yet for any true comparisons. Those who hold a basic allegiance to the computerised version of CBT tend to publish favourable results as [n]Luborsky (1999) has pointed out, and too few independent research groups have looked at the same comparisons. Their conclusion is that computerised CBT possibly may be as effective as therapist-led CBT but the evidence is not there to make such a recommendation. One conclusion that may be self-evident is that the computerised version cuts down on therapist time and thus costs.

A hybrid type of therapy has been developed for use on-line, where a session between therapist and client is conducted through email. When clients were asked to evaluate their email therapy session in [4]Reynolds et al.’s study (2006), the therapeutic alliance ratings were within the range of those of face-to-face therapy clients.

[1]Speilmans et al.’s meta-analysis (2007) corroborated the Dodo effect and recommended that emphasis in therapist training should be on those factors common to all different varieties of bono fide therapy, such as therapeutic alliance, rather than focusing on the technical delivery of empirically supported specific treatments such as CBT.

Interestingly, [1]Miller et al. (2004) ran an RCT which asked the question about which of various MI training methods produced the best therapists. All the methods which involved contact with trainers resulted in better therapists and a continuation of the training in the form of post-course coaching enhanced their proficiency even more. It appeared that change was associated with human contact in both the therapy context and the training one.

Summary

Therapeutic alliance is an integral part of all three therapies discussed in this document, and arguably in all of the bone fide ‘talking’ therapies. There is some evidence to suggest that it is the backbone of the talking therapies, given the importance of the Dodo effect observation. Those therapies that involve no therapist

such as computerised CBT appear to have problems with drop-out rates and those which have even a small input from a therapist have better outcomes. Measuring what is involved in the therapeutic relationship is difficult although many good minds are attempting to deconstruct it. The area needs more academic theorising and research before the evidence can be quantified. This does not take away from the agreement of clients, therapists and independent raters that the therapeutic alliance is not only vital but measurable. Research suggests that therapeutic alliance is an important predictor of psychotherapeutic outcomes.

Key points

- That evidence points to the importance of the therapeutic alliance and other as yet unidentified factors common to all recognised psychotherapies.
- It suggests the importance of ensuring that all mental health and addictions staff are well-trained in developing an effective therapeutic alliance and in fostering agreement about the goals and tasks of the intervention.

Conclusion

This report reflects current evidence-based thinking but is not intended to be a substitute for a full systematic review. Given this caveat, the conclusions from the review are provided in the following paragraphs.

Cognitive behaviour therapy is set up for research and the plethora of available systematic reviews and meta-analyses attest to this fact. When CBT is compared to other theoretical and practical approaches, most often it is found to be as good as any other with the caveat that no therapeutic approach is universally superior to any other. The Dodo effect has not been refuted. Motivational interviewing seems to be well accepted and as a stand alone or brief adjunct to other therapies can enhance engagement and commitment to change. Dialectical behaviour therapy research is amassing evidence towards it being a viable treatment for a very complex group of people who are difficult to treat.

One of the clear problems encountered in the preparation of this report is the dearth of suitable studies that answer the question about suitability of CBT, DBT and MI for Māori, Pacific and Asian consumers in New Zealand. It is plain that many participants in New Zealand research projects are from these minorities, yet the question about which psychotherapy works for specific groups has not been answered. Resources need to become available for such research, designed to the highest standards and including large enough numbers to scientifically answer the question.

Internationally, CBT, DBT and MI all are found in adapted versions specific for groups who did not originally respond to the standard version. Should future research indicate that standard versions of CBT, DBT or MI are not gaining the results expected in Māori, Pacific and Asian consumers, adaptations could be considered, tested and published prior to general application to these cultural minorities. Peters (2007a) made reference to a senior Māori psychologist who is working with her own adapted version of CBT. This may be the beginning of a process that could eventually lead to adapted bone fide treatments appropriately tested for New Zealand minorities.

There is a plethora of evidence to support Peters (2007a), who concluded in her anecdotal report that CBT and MI were therapies which incorporate core skills. These therapies are not alone in providing quality care, but the infrastructure is currently available in New Zealand to increase their availability. Acceptability is already extant. The only caveat is that other therapies mentioned in this report also deliver quality care and should not be denigrated if offered by appropriately trained therapists.

Many authors, especially those of reviews, point out that we still do not know how to identify the active ingredient in psychotherapy. One of the strongest indications for at least one element is the evidence about the significance of the therapeutic alliance, universally acknowledged as important in the delivery of a therapy, but also consistently associated with outcome. The question is still on the table.

Summary of the key points

Question 1: Cognitive behaviour therapy

Key points

- That the evidence is strong for the use of CBT in the following diagnostic categories:
  - depression (all age groups although the best evidence is for younger adults)
  - anxiety disorders such as Generalised Anxiety Disorder and panic
  - adapted CBT for PTSD.
- That some evidence is available (but of lesser strength) for the use of CBT in the following diagnostic categories:
  - schizophrenia (for anxiety-like symptoms only)
  - bipolar disorder (for relapse prevention only)
  - children's anxiety disorders and OCD
  - substance use disorders (weak recommendation after contingency management and brief therapies like MI)
  - eating disorders (some evidence for bulimia only).

Question 2: Dialectical behaviour therapy

Key points

- Evidence at hand shows promise for DBT eventually becoming recognised as a viable method of achieving change in a group of people notoriously difficult to either engage with or derive benefits from therapy.
- That consideration be given that data provided by clinical use of DBT in New Zealand be collected and analysed to better evaluate its impact on outcomes.
- That DBT is considered to be able to decrease the incidence of parasuicidal behaviours.

Question 3: Ethnic minorities

Key points

- The results of this literature search confirm the assertion by Peters (2007a) that little research has been done that draws conclusions about how psychotherapy affects the Māori, Pacific or Asian New Zealand populations.

That future psychotherapy research is encouraged to examine the viability of the various psychotherapies for different ethnic groups (e.g. Māori, Pacific and Asian populations) in New Zealand.

Question 4: Motivational interviewing

Key points

- Motivational interviewing is a suitable intervention in the substance use domain, particularly with alcohol, with all age groups including youth, either as a stand-alone therapy or as a value-added component.
- Motivational interviewing can be used in conjunction with CBT to enhance engagement in mental health.
- Motivational interviewing is suitable for use with people with psychotic illnesses to enhance adherence.

Question 5: Therapeutic relationship

Key points

- That evidence points to the importance of the therapeutic alliance and other as yet unidentified factors common to all recognised psychotherapies.
- It suggests the importance of ensuring that all mental health and addictions staff are well-trained in developing an effective therapeutic alliance and in fostering agreement about the goals and tasks of the intervention.

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Appendix A

Table 1: Levels of evidence

Each citation in the body of the report carries a superscript annotation referring to this table.

Level of evidence		Where the evidence comes from
1	Evidence with a high degree of reliability	Studies that use well-tested methods to make comparisons in a fair way and where the results leave very little room for uncertainty. Trial design: usually Level 1 studies are systematic reviews or large, high-quality randomised controlled studies.
2	Evidence with reliability but open to debate	Studies that use well-tested methods to make comparisons in a fair way but where the results leave room for uncertainty (for example, due to the size of the study, losses to follow-up or the method used for selecting groups for comparison). Trial design: usually Level 2 studies are systematic reviews without consistent findings, small randomised controlled trials, randomised controlled trials in which large numbers of participants are lost to follow-up, or cohort studies.
3	Some evidence without a high degree of reliability	Studies where the results are doubtful because the study design does not guarantee that fair comparisons can be made. Trial design: usually Level 3 studies are systematic reviews of case-control studies or individual case-control studies.
4	Some evidence but based on studies without comparable groups.	Studies where there is a high probability that results are due to chance (for example because there is no comparison group or because the groups compared were different at the outset of the study). Trial design: usually cohort or case-control studies where the groups were not really comparable, or case-series studies.
n	Other: Surveys, time series or narrative discussion.	Papers which are not studies but rather are narrative, theoretical or explanatory in nature or are epidemiological surveys and/or time series.

Appendix B

Sample search terms used for Questions 1 and 2

* abuse
* addiction
* analy
* analysis
* behavio
* cbt
* centers
* cognitive
* dbt
* dialectic
* disorders
* health
* literature
* mental
* meta
* meta-analysis
* meta analy
* overview
* review
* service
* services
* substance
* substance-related
* systematic
* therapy
* topic
* treatment