

Cognitive Behavioral Therapy and Schizophrenia: A Survey of Clinical Practices and Views on Efficacy in the United States and United Kingdom

Andrew M. Kuller · Brian D. Ott ·
Robert M. Goisman · Laurel D. Wainwright ·
Rebecca J. Rabin

Received: 28 October 2008 / Accepted: 13 July 2009 / Published online: 25 July 2009
© Springer Science+Business Media, LLC 2009

Abstract Research has shown that cognitive-behavioral therapy (CBT) is effective in the treatment of schizophrenia (Wykes et al. in *Schizophr Bull* 34(3):523–537, 2008). The majority of this research has been conducted in the United Kingdom (Beck and Rector in *Am J Psychother* 54:291–300, 2000) where the National Health Service recommends that CBT be delivered to all people with schizophrenia (NICE in *Schizophrenia: core interventions in the treatment and management of schizophrenia in primary and secondary care* (update). <http://www.nice.org.uk/Guidance/CG82/NiceGuidance/pdf/English>, 2009). In contrast, the corresponding American Psychiatric Association guidelines describe CBT as an adjunctive technique that “may benefit” patients (Lehman et al. in *Am J Psychiatry* 161:1–56, 2004, p. 35). Anecdotal evidence also suggests a difference between UK and US clinicians’ use of and views on CBT with schizophrenia (TARRIER in *Clinical handbook of psychological disorders: a step-by-step treatment manual*. Guilford, New York, 2008). In the present study 214 clinicians in the UK and US completed an internet survey examining this apparent discrepancy. UK and US participants were equally aware that empirical research supports the efficacy of CBT with schizophrenia. However, UK participants were more likely to practice CBT, rated CBT effectiveness more highly, and were more optimistic about

the chances of recovery. These findings suggest fundamental differences in the attitudes and practices of UK and US clinicians.

Keywords Cognitive behavioral therapy · Schizophrenia · Efficacy · Treatment guidelines

Introduction

People with schizophrenia experience a variety of debilitating symptoms, including delusions, hallucinations, and formal thought disorder. Because psychological functioning is so often severely compromised, the standard treatment for schizophrenia historically has been antipsychotic medication combined with case management (TARRIER 2008). Unfortunately, evidence from the clinical antipsychotic trials in intervention effectiveness (CATIE) now suggests that the second generation of antipsychotic medications may be no more effective than earlier medication regimens, with similarly disappointing side effect profiles (Lieberman et al. 2005). Indeed, adherence rates remain between 10 and 80% (Mueser and McGurk 2004; Kingdon et al. 2007) and a significant proportion of patients continue to experience psychotic symptoms throughout their lifetime (Kane 1996). People with schizophrenia also typically experience significant secondary morbidity, including depression, anxiety and social/occupational dysfunction (Birchwood et al. 1993). Therefore, it is generally acknowledged that pharmacological treatment alone is rarely sufficient for the best outcome (Pilling et al. 2002). Today’s mental health practitioners are faced with the difficult task of identifying and implementing psychological treatments that can effectively complement the effects of medication and case

A. M. Kuller (✉) · B. D. Ott · L. D. Wainwright
Massachusetts School of Professional Psychology,
221 Rivermoor Street, West Roxbury, MA 02132, USA
e-mail: andrew_kuller@mspp.edu; akuller@gmail.com

A. M. Kuller · R. M. Goisman · R. J. Rabin
Massachusetts Mental Health Center/Harvard Medical School,
180 Morton St., Jamaica Plain, MA 02130, USA

management. Especially important are approaches that capture additional sources of outcome variance.

The cognitive-behavioral approach to the treatment of schizophrenia has drawn considerable attention worldwide as health care systems continue to embrace evidence-based practices (Tarrier 2008) and clinicians are expected to deliver treatments with demonstrated efficacy in randomized controlled trials. CBT is one of the fastest-growing and most extensively researched theoretical orientations and has been modified to treat the majority of clinical problems (Beck 2005).

The development of CBT applications with schizophrenia has occurred primarily in the United Kingdom (Kingdon and Turkington 2005; Chadwick et al. 1996). CBT for schizophrenia is not a unitary approach. Techniques range from collaborative clinician-patient evaluation of delusional beliefs to identification of underlying dysfunctional core beliefs about the self, world, and future (Tarrier and Wykes 2004; Turkington and McKenna 2003). According to Tarrier (2008), common elements across all models include the establishment of a therapeutic relationship, the identification of psychotic experiences, and attempts to modify cognition and behavior to reduce psychotic symptomatology. Delusions and hallucinations are viewed as the result of cognitive processes that lie on a continuum from dysfunctional to “normality” (Fowler et al. 1998, p. 124). By modifying dysfunctional cognitions, the patient can reduce the frequency, intensity and duration of psychotic symptoms. Turkington et al. (2008) suggest that CBT should provide normalizing rationales for psychotic symptoms, enhancing coping strategies for auditory hallucinations and developing alternative explanations for paranoid delusions. In cases where psychotic symptoms are resistant to intervention, a cognitive-behavioral approach can decrease medication non-compliance (Kingdon et al. 2007) and enable patients to cope with secondary morbidity (Beck and Rector 2000).

More than 20 randomized controlled trials have been completed comparing the outcome of “treatment as usual” (TAU; medication and case management) and TAU with the addition of CBT. Numerous meta-analytic studies have been completed using the data from these studies with effect sizes varying across independent variables such as patient characteristics and acute versus chronic course, and dependent variables such as short versus long term results and nature of symptoms (e.g., Gould et al. 2001; Pilling et al. 2002; Rector and Beck 2001; Tarrier and Wykes 2004; Dickerson 2004; Zimmermann et al. 2005; Wykes et al. 2008). In one recent meta-analysis, Zimmermann et al. (2005) focused on acute versus chronic course and the effect on positive symptoms. Fourteen randomized controlled trials which included 1,484 participants were examined to determine the efficacy of TAU and CBT

versus TAU alone or TAU with a non-CBT adjunctive therapy. Positive effect sizes of .57 and .27 were found for acute and chronic conditions, respectively, indicating that improvement scores in the CBT patients exceed those of the control group by approximately 22% for acute and 11% for chronic patients. These are considered low to moderate effect sizes but do reflect therapeutic change over and above that attained through medication and case management alone.

More recently, Wykes et al. (2008) reviewed earlier meta-analytic studies and raised issues regarding methodological flaws, including the lack of masked assessment (analogous to a medication study without a double-blind control group). When such issues were accounted for in selection and analyses of studies, CBT interventions continued to demonstrate effectiveness with an average effect size of .40. Including CBT as a third approach in the TAU regimen is well justified by these results, particularly with acutely ill patients.

The national institute for clinical excellence (NICE), a committee of the UK National Health Service created to advance evidence-based practices, has taken just this position. In its guidelines for schizophrenia, CBT is highlighted as a treatment option that should be offered to all people with schizophrenia (NICE 2009). In the US, CBT is also recommended as a treatment option. However, the American Psychiatric Association takes a comparatively conservative position, recommending CBT with “moderate clinical confidence” for patients suffering with residual psychotic symptoms during the stable phase of the illness (Lehman et al. 2004).

This apparent distinction between treatment guidelines in the UK and US appears to be reflected in research activities and clinical practices. The UK has produced the majority of the empirical research on CBT with schizophrenia (Tarrier 2005). In Zimmerman’s (2005) meta-analysis, 12 of 14 articles had senior author affiliations in the UK (the others were based in Canada and Italy). Further, anecdotal evidence suggests that the majority of clinicians pioneering CBT with schizophrenia practice in the UK (e.g., Wykes et al. 2008). However, to date there has been no direct assessment of differences between the UK and US with regard to the use of CBT with schizophrenia.

The purpose of the present study was to determine whether clinicians in the UK and US are using CBT to treat schizophrenia. Clinicians were surveyed to identify current clinical practices. Perceptions of the efficacy of CBT with schizophrenia were also examined to identify attitudinal biases. To reflect current clinical practices and perspectives accurately and in context, clinicians were also surveyed about other treatment modalities commonly used to treat schizophrenia.

Methods

Survey

An internet survey was distributed to clinicians in the United States and United Kingdom. Participants were asked to provide basic demographic information, to identify clinical practices, to report beliefs about the efficacy research, and to predict the likelihood of recovery from schizophrenia.

Participants

All participants were clinicians licensed with a degree in clinical psychology, counseling, medicine, nursing, occupational therapy, or social work.

Procedures

Participants were solicited through an email sent to the listserves of the international society for psychotherapy with schizophrenia (ISPS-INT@yahoogroups.org), the Massachusetts Psychological Association (masspsych@lists.apa-practice.org), and the psychosis and complex mental health committee (http://www.bps.org.uk/dcp-sigpr/dcp-sigpr_home.cfm). The email included a brief explanation of the study and a hyperlink to the online survey hosted at www.surveymonkey.com. The solicitation email also contained a request that participants forward the email to other potential participants (i.e., clinicians who treat schizophrenia using psychotherapeutic techniques). Informed consent was secured electronically. Responses were submitted anonymously and participants were not asked to identify how they had learned of the study. Therefore it was not possible to track participant affiliations. There were no known conflicts of interest with this study. The research design was approved by the IRB of the Massachusetts School of Professional Psychology.

Measures

The variables used in this study include gender, age, type of degree and type of clinical license, years of professional experience, and national affiliation. Participants' age and years of clinical experience were measured as continuous variables. Gender and national affiliation (US or UK) were measured as dichotomous variables. Degree and professional license were measured as categorical variables. For clarity of interpretation, all dependent variables were limited to forced choice responses or Likert-type scales.

The primary purpose of this survey was to assess use and views of CBT. Seven additional treatment modalities were included among the variables in order to neutralize

demand characteristics. These modalities were ECT, family therapy, humanistic/existential psychotherapy, medication, narrative therapy, personal therapy, and psychodynamic psychotherapy. Narrative therapy, originally developed in Australia and New Zealand, is a psychological approach emphasizing the idea that illness symptoms can be redefined contextually through the construction of personalized stories about identity and illness (White and Epston 1990). Personal therapy, developed in the US, is based on the underlying pathophysiology of schizophrenia and focuses on affect regulation and coping skills (Hogarty et al. 1995).

The survey instrument assessed two broad domains in the treatment of schizophrenia: clinical practice and treatment efficacy. In the domain of clinical practice, caseload composition was assessed as a dichotomous (yes/no) variable (i.e., "Do you typically have more than two patients with schizophrenia in your caseload?"). Current clinical practices were assessed by having participants record a dichotomous (yes/no) variable for each treatment modality.

In the domain of treatment efficacy, participants answered questions that assessed beliefs about efficacy and research findings. First, participants were asked to estimate the real-world effectiveness of each treatment modality. Then participants were asked whether research had been conducted on the efficacy of each treatment modality, and what the research findings were for each treatment modality. Finally, participants estimated the likelihood of recovery from schizophrenia.

Results

Sample Characteristics

A total of 231 participants logged into the survey and agreed to participate. About 214 participants responded to the question "Nation in which you practice psychotherapy." The 17 participants who did not identify as either US or UK were excluded from data analysis. About 111 of 214 participants (51.9%) reported that they practiced in the United States, and 103 participants (48.1%) reported that they practiced in the United Kingdom. 187 participants ($n = 214$, 87.4%) completed all ten survey questions, while 27 participants skipped one or more questions.

The majority of clinicians participating in this study identified as licensed clinical psychologists ($n = 151$, 70.6%). Table 1 presents the distribution of participants by clinical license. Psychiatrists are identified by their clinical license, medicine. A total of 16 participants identified their clinical license as "Other." These participants were provided a blank response field in which to enter their license manually.

Table 1 Sample demographics by clinical license

License	United States (<i>N</i> = 111)		United Kingdom (<i>N</i> = 103)	
	%	<i>n</i>	%	<i>n</i>
Clinical psychology	60.4	67	81.6	84
Counseling	5.4	6	1.0	1
Medicine	8.1	9	3.9	4
Nursing	3.6	4	8.7	9
Social work	11.7	13	1.0	1
Other (“cognitive therapy”)	1.8	2	.0	0
Other (“CBT”/”CBT therapist”)	1.8	2	1.9	2
Other (“counseling psychologist”)	1.8	2	.0	0
Other (“family therapy”)	.0	0	1.9	2
Other (“mental health”)	.9	1	.0	0
Other (“psychology”)	1.8	2	.0	0
Other (“psychotherapist”)	.9	1	.0	0
Other (“school psychology”)	.9	1	.0	0
Other (blank)	.9	1	.0	0

The US sample was older and more experienced. The mean age of US participants was 48.14 years, compared to 40.63 years for UK participants (t -test = 4.949, $p < .000$). US participants reported a mean of 14.91 years of clinical practice, compared to 9.29 years for UK participants (t -test = 3.86, $p < .000$). In terms of gender distribution across the total sample, 119 were female ($N = 214$, 55.6%) and 95 were male (44.4%), with no significant difference between the US and UK samples.

Typical Caseload

Participants were asked whether they typically have more than two patients diagnosed with schizophrenia in their caseload. UK participants were more likely to respond “yes” (80 of 102, 78.4%) than were US participants (51 of 109, 46.8%). A Pearson Chi-Square calculation determined that the difference between the two samples was significant ($\chi = 22.41$, $p < .000$).

Table 2 Current clinical practices with schizophrenia

Treatment modality	United States (<i>N</i> = 111)		United Kingdom (<i>N</i> = 103)	
	%	<i>n</i>	%	<i>n</i>
CBT	58.6	65	91.3	94
ECT	0	0	0	0
Family therapy	19.8	22	40.8	42
Humanistic/existential	26.1	29	14.6	15
Medication	34.2	38	11.7	12
Narrative	7.2	8	24.3	25
Personal therapy	9	10	9.7	10
Psychodynamic	34.2	38	20.4	21

Current Clinical Practices with Schizophrenia

Participants were asked to identify their clinical practices when working with patients diagnosed with schizophrenia. Participants were shown a list of treatment modalities and asked to check all that apply. Table 2 presents reported clinical practices. UK clinicians were more likely to use CBT ($\chi = 29.93$, $p < .000$), family therapy ($\chi = 11.19$, $p < .001$), and narrative therapy ($\chi = 11.93$, $p < .001$). US clinicians were more likely to use medication ($\chi = 15.28$, $p < .000$), humanistic/existential psychotherapy ($\chi = 4.37$, $p < .037$) and psychodynamic psychotherapy ($\chi = 5.13$, $p < .024$).

Perceived Effectiveness of Treatments for Schizophrenia

Participants were asked to rate the real-world effectiveness of each treatment modality with schizophrenia on a 5-point Likert scale with responses limited to: (1) not effective at

Table 3 Perceived effectiveness of treatments for schizophrenia

Treatment modality	United States			United Kingdom		
	<i>n</i>	Mean	SD	<i>n</i>	Mean	SD
CBT	103	2.98	.792	98	3.44	.704
ECT	103	1.52	.790	97	1.45	.764
Family therapy	103	2.98	.896	98	3.26	.777
Humanistic/exist	103	2.51	1.008	98	2.35	.748
Medication	102	3.51	.992	98	3.24	.800
Narrative	104	2.20	.907	98	2.65	.886
Personal	103	2.43	.914	98	2.42	.861
Psychodynamic	103	2.38	1.112	97	2.22	.904

all, (2) modest effectiveness, (3) moderate effectiveness, (4) significant effectiveness, and (5) completely effective. Across the entire study sample, the most effective treatment for schizophrenia was estimated to be medication ($M = 3.38$, $SD = .911$), followed by CBT ($M = 3.20$, $SD = .783$) and family therapy ($M = 3.11$, $SD = .850$). Participants rated the least effective treatment as ECT ($M = 1.49$, $SD = .776$).

Compared to US clinicians, UK clinicians were more optimistic about the effectiveness of CBT (t -test = -4.326 , $p < .000$), family therapy (t -test = 2.315 , $p < .022$), and narrative therapy (t -test = -3.572 , $p < .000$). US clinicians rated the effectiveness of medication more highly (t -test = 2.073 , $p < .039$). Table 3 presents the effectiveness ratings for these treatment modalities.

Beliefs About the Existence of Efficacy Research on Treatments for Schizophrenia

Participants were asked whether efficacy research has been conducted on CBT plus treatment-as-usual (TAU) for schizophrenia. In the survey, TAU for schizophrenia was defined as “medication and case management.” Participants were also asked if research has been conducted on combined TAU with ECT, family therapy, humanistic/existential psychotherapy, narrative therapy, personal therapy and psychodynamic psychotherapy. Responses were limited to a dichotomous variable (yes/no), and participants were permitted to abstain from providing a response for each individual treatment modality(s).

The majority of participants said that efficacy research has been conducted on CBT (plus TAU) for schizophrenia ($n = 189$, 99.5%). Participants were less likely to report that research has been conducted on any other treatment modality. UK participants were more likely to report that family therapy research has been conducted. 100% ($n = 90$) of UK responders endorsed that family therapy research had been conducted, compared to 87.8% ($n = 98$)

Table 4 Beliefs about the existence of efficacy research on treatments combined with treatment-as-usual

Treatment modality	United States		United Kingdom	
	Yes % (<i>n</i>)	No % (<i>n</i>)	Yes % (<i>n</i>)	No % (<i>n</i>)
CBT	99.0 (97)	1.0 (1)	100.0 (92)	.0 (0)
ECT	58.8 (57)	41.2 (40)	58.1 (43)	41.9 (31)
Family therapy	87.8 (86)	12.2 (12)	100.0 (90)	.0 (0)
Humanistic/exist	37.2 (35)	62.8 (59)	28.2 (20)	71.8 (51)
Medication	95.9 (93)	4.1 (4)	95.9 (70)	4.1 (3)
Narrative	31.9 (30)	68.1 (64)	37.8 (28)	62.2 (46)
Personal	45.2 (42)	54.8 (51)	44.6 (33)	55.4 (41)
Psychodynamic	77.6 (76)	22.4 (22)	78.2 (61)	21.8 (17)

Defined as medication and case management

of US responders ($\chi = 11.772$, $p < .001$). Table 4 presents knowledge of efficacy research as reported by participants.

Beliefs About Efficacy Research Findings on Treatments for Schizophrenia

Participants were asked to summarize the research findings for the efficacy of each psychological treatment combined with TAU (i.e., medication plus case management). Forced-choice responses were limited to “Better than TAU alone,” “Worse than TAU alone,” or “No different than TAU alone.” Participants were permitted to abstain from providing a response for each individual treatment modality(s).

A total of 179 participants responded to this question ($N = 214$, 83.6%). CBT plus TAU for schizophrenia was perceived as “Better than TAU alone” by the majority of participants across the total sample ($n = 171$, 96.6%). Table 5 presents participants’ beliefs about research findings. Only two treatments were perceived differently between US and UK samples: family therapy and

Table 5 Beliefs about efficacy research findings for treatments combined with treatment-as-usual

Treatment	Better than TAU		Worse than TAU		Equivalent to TAU	
	US	UK	US	UK	US	UK
CBT	79	88	1	0	4	1
ECT	15	7	8	6	22	33
Family	60	81	1	0	9	1
Human/exist	21	14	4	0	22	17
Narrative	16	19	2	0	23	14
Personal	23	12	2	0	23	20
Psychodynamic	34	19	4	13	26	18

Defined as medication and case management

psychodynamic psychotherapy. Of participants reporting on family therapy, 98.8% of UK responders ($n = 82$) reported greater efficacy than TAU alone, compared to 85.7% ($n = 70$) in the US ($\chi = 9.64$, $p < .008$). Of participants reporting on psychodynamic psychotherapy, 53.1% ($n = 64$) of US responders reported greater efficacy than treatment-as-usual alone, compared to 38.0% ($n = 50$) in the UK ($\chi = 8.88$, $p < .012$).

Chances of Recovery

Finally, participants were asked to rate the likelihood of recovery from schizophrenia on a 5-point Likert scale with the following intervals: (1) 0–20%, (2) 20–40%, (3) 40–60%, (4) 60–80%, or (5) 80–100%. For the purposes of data analysis, each interval was assigned a corresponding numerical value from 1 to 5, so that “0–20%” = 1, and so on. UK clinicians reported a significantly higher likelihood of recovery, with a mean of 3.44 (i.e., 60–80%) compared to a US mean of 2.51 (i.e., 40–60%; t -test = -5.427 , $p < .000$).

Discussion

Participants across nations perceived CBT and medication as the two most effective treatments for patients diagnosed with schizophrenia. However, there were important differences between population samples. UK participants were more likely to practice CBT, rated the effectiveness of CBT more highly, and estimated the chances of recovery from schizophrenia more highly. US participants rated the effectiveness of medication more highly and were more likely to report the use of medication as a treatment modality. These findings suggest fundamental differences in the practices and attitudes of US and UK clinicians.

In attempting to understand the international divide, several factors have been considered (Turkington et al. 2006). Perhaps the most significant causal factor involves disparities between health care delivery systems. The UK offers universal health care while health care providers in the US rely on third-party payment. This profound structural difference has tremendous impact on the delivery of psychological treatments. In the UK, where the national health service (NHS) funds the health care industry, research and clinical practice are multidisciplinary and mental health training programs are standardized. This consolidated infrastructure has systematically facilitated the establishment of evidence-based practices since at least the late-1980s (Barlow 2005). In the US, health care is privatized and third-party payers do not typically require practitioners to deliver empirically validated treatments. US clinicians are likely to deliver empirically informed

treatments which have not been rigorously tested in randomized controlled trials. Therefore, the US has not yet experienced the same massive shifts towards evidence-based research or clinical practice (Crits-Christoph et al. 2005).

Another closely related factor involves the educational infrastructure. Presently the US is not equipped to effectively disseminate and utilize the latest psychological treatments. The American Psychological Association allows graduate psychology programs to adopt “any philosophy of training they wish,” regardless of the latest research findings (Crits-Christoph et al. 2005, p. 415), and only a minority of predoctoral internships provide comprehensive training in evidence based treatments (Beck 2005). In US psychiatry, while training in cognitive-behavioral therapy (CBT) has been mandated for residents in psychiatry by the Accreditation Council for Graduate Medical Education, many training programs lack trained cognitively trained clinicians to provide supervision to psychiatry residents (Beck 2005). Therefore, US clinicians are less likely to be trained in the latest evidence-based modalities, and cutting-edge treatments such as CBT for schizophrenia are less likely to be implemented on a widespread basis.

Another possibility is that clinical practices in the treatment of schizophrenia vary internationally as a reflection of underlying differences in theories of etiology and approaches to treatment. In US psychiatry and psychology, the medical model is pervasive and manifestations of psychological distress often kindle etiological theories that emphasize organic factors; if a psychosocial theory is considered, it is more likely to be psychodynamic than cognitive-behavioral. If the American conception of schizophrenia continues to be rooted in Kraepelin’s theories about organic disease processes, then it would follow that US clinicians would be pessimistic about recovery and would view pharmacology as the treatment most likely to have a significant effect. As suggested by Wykes et al. (2008), the relative optimism of UK clinicians could be rooted in a service structure that promotes individualized case formulation and idiosyncratic approaches to treatment. UK clinicians who emphasize psychogenic or environmental factors would probably be more optimistic about recovery from schizophrenia, and almost certainly would be more likely to advocate for psychological interventions such as CBT.

Limitations

The internal validity of this study is limited by selection bias. Some US participants were recruited through the Massachusetts Psychological Association, a professional organization with less explicit connection to the treatment

of schizophrenia than the International Society for Psychotherapy with Schizophrenia or the UK's psychosis and complex mental health committee. Not surprisingly, US participants were less likely to report having more than two patients diagnosed with schizophrenia in their caseload. Even within the UK sample, there is heterogeneity among clinicians in terms of contact with patients with schizophrenia. Therefore, some of the participants in this survey may have responded speculatively to questions regarding clinical practices with schizophrenia. In future studies, conclusions about current clinical practices may be more useful if drawn strictly from clinicians who regularly treat schizophrenia.

Other potential sources of selection bias involve the age, experience level and licenses of the participant pool. Clinical psychology was represented far more heavily than all of the other disciplines combined. The UK sample had a greater concentration of clinical psychologists, while the US sample was older and more experienced than the UK sample.

The internal validity of this study is also limited by the survey instrument's design. Some participants objected to the design of some of the survey questions. For example, one item was a forced-choice answer requiring participants to choose either "Yes, research has been conducted" or "No, research has not been conducted." Three participants commented that they would have liked to have the option of responding "I don't know if research has been conducted."

Four participants commented about the wording of the final question, "Please estimate the likelihood of recovery from schizophrenia." These participants preferred a more precise definition of "recovery," indicating that their responses to the question as phrased were arbitrary. It might have been useful to provide a more precise definition of recovery from schizophrenia to identify any systematic interpretive biases in the UK and US. Still, some degree of subjectivity seems to be inherent in the concept of recovery. Current measures range from complete clinical recovery to more personal definitions that are not limited to the absence of psychiatric symptoms, disabilities or the use of services (Davidson and McGlashan 1997; SCIE 2008). The recovery movement, prominent in both the UK and US, emphasizes subjectively-felt, lived experiences (Ralph and Corrigan 2005), and attempts to capture psychological constructs such as empowerment, hope, knowledge and life satisfaction (Resnick et al. 2005). In future surveys, it will be important to define recovery more precisely to better identify international differences in therapeutic optimism.

Future Research Needs

Meta-analyses suggest with moderate clinical confidence that CBT has a significant effect size with schizophrenia.

However, results from individual randomized controlled trials are limited by methodological flaws and lack of long-term follow-up. Future research should utilize more rigorous and sophisticated methodologies. Numerous trials with larger sample sizes and more varied patient characteristics will be necessary before conclusions can be drawn about efficacy. To increase validity, future trials of CBT should include patients throughout North America and other areas internationally.

As a follow-up to this study, future efforts should utilize random sampling techniques to minimize sampling bias. More specific survey questions would identify more precisely the differences between US and UK clinicians' beliefs and clinical practices. For example, the present study failed to identify clinicians' familiarity with specific research studies, and the heterogeneity among cognitive-behavioral treatments for schizophrenia was not addressed.

Conclusions

Community mental health practitioners have an ethical responsibility to deliver treatments with the highest demonstrated efficacy. CBT is the psychosocial treatment with the greatest demonstrated efficacy for schizophrenia. Therefore, clinicians who work with schizophrenia should deliver cognitive-behavioral treatments to patients diagnosed with schizophrenia. However, relative to UK clinicians, US participants are less likely to practice CBT. US clinicians are also less confident about the efficacy of CBT, suggesting a relationship between therapeutic optimism and clinical practices.

Differences between British and American clinicians in the treatment of schizophrenia may suggest fundamental differences in health care delivery systems, in national attitudes towards clinical research, or in etiological theories of schizophrenia. The recent requirement of demonstrable competency in CBT among psychiatry residency graduates may help bring US clinicians into greater agreement with their British counterparts in this area. Further, as the US health care system continues to move towards evidence-based practices, clinicians treating schizophrenia will encounter greater pressure to deliver empirically validated treatments. It will be increasingly important to identify the environmental barriers and attitudinal factors preventing US clinicians from providing a treatment with the greatest likelihood of success.

References

- Barlow, D. H. (2005). What's new about evidence-based assessment? *Psychological Assessment*, 17, 308–311.

- Beck, A. T. (2005). The current state of cognitive therapy. *Archives of General Psychiatry*, 62, 953–959.
- Beck, A. T., & Rector, N. A. (2000). Cognitive therapy for schizophrenia: A new therapy for the new millennium. *American Journal of Psychotherapy*, 54, 291–300.
- Birchwood, M., Mason, R., MacMillan, F., & Healey, J. (1993). Depression, demoralization and control over psychotic illness: A comparison of depressed and non-depressed patients with chronic psychosis. *Psychological Medicine*, 23, 387–395.
- Chadwick, P., Birchwood, M., & Trower, P. (1996). *Cognitive therapy for delusions, voices and paranoia*. Oxford: Wiley.
- Crits-Christoph, P., Wilson, G., & Hollon, S. (2005). Empirically supported psychotherapies: Comment on Western, Novotny, and Thompson-Brenner (2004). *Psychological Bulletin*, 131(3), 412–417.
- Davidson, L., & McGlashan, T. H. (1997). The varied outcomes of schizophrenia. *Canadian Journal of Psychiatry*, 42, 34–43.
- Dickerson, F. B. (2004). Update on cognitive behavioral psychotherapy for schizophrenia: Review of recent studies. *Journal of Cognitive Psychotherapy*, 18(3), 189–205.
- Fowler, D., Garety, P., & Kuipers, E. (1998). Cognitive therapy for psychosis: Formulation, treatment, effects and service implications. *Journal of Mental Health*, 7, 123–134.
- Gould, R. A., Mueser, K. T., Bolton, E., Mays, V., & Goff, D. (2001). Cognitive therapy for psychosis in schizophrenia: An effect size analysis. *Schizophrenia Research*, 48, 335–342.
- Hogarty, G. E., Kornblith, S. J., Greenwald, D., DiBarry, A. L., Cooley, S., Flesher, S., et al. (1995). Personal therapy: A disorder-relevant psychotherapy for schizophrenia. *Schizophrenia Bulletin*, 21, 379–393.
- Kane, J. M. (1996). Treatment resistant schizophrenic patients. *Journal of Clinical Psychiatry*, 57(suppl. 9), 35–40.
- Kingdon, D., Rathod, S. R., Hansen, L., Naeem, F., & Wright, J. H. (2007). Combining cognitive therapy and pharmacotherapy for schizophrenia. *Journal of Cognitive Psychotherapy*, 21, 28–36.
- Kingdon, D., & Turkington, D. (2005). *Cognitive therapy of schizophrenia*. New York: Guilford Press.
- Lieberman, A. F., Lieberman, J. A., Dixon, L. B., McGlashan, T. H., Miller, A. L., Perkins, D. O., et al. (2004). Practice guideline for the treatment of patients with schizophrenia, second edition. *American Journal of Psychiatry*, 161, 1–56.
- Lieberman, J. A., Stroup, T. S., McEvoy, J. P., Swartz, M. S., Rosenheck, R. A., Perkins, D. O., et al. (2005). Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *New England Journal of Medicine*, 353, 1209–1223.
- Mueser, K. T., & McGurk, S. R. (2004). Schizophrenia. *Lancet*, 363, 263–272.
- National Institute for Clinical Excellence. (2009). *Schizophrenia: Core interventions in the treatment and management of schizophrenia in primary and secondary care (update)*. Retrieved April 20, 2009, from <http://www.nice.org.uk/Guidance/CG82/NiceGuidance/pdf/English>.
- Pilling, S., Bebbington, P., Kuipers, E., Garety, P., Geddes, J., Orbach, G., et al. (2002). Psychological treatments in schizophrenia: I. Meta-analysis of family intervention and cognitive behaviour therapy. *Psychological Medicine*, 32, 763–782.
- Ralph, R., & Corrigan, P. (2005). *Recovery in mental illness: Broadening our understanding of wellness*. Washington, DC: American Psychological Association.
- Rector, N. A., & Beck, A. T. (2001). Cognitive behavior therapy for schizophrenia: An empirical review. *Journal of Nervous and Mental Disease*, 189, 278–287.
- Resnick, S., Fontana, A., Lehman, A., & Rosenheck, R. (2005). An empirical conceptualization of the recovery orientation. *Schizophrenia Research*, 75(1), 119–128.
- Social Care Institute for Excellence. (2008). SCIE position paper 08: A common purpose: Recovery in future mental health services. Retrieved May 5, 2009, from <http://www.scie.org.uk/publications/positionpapers/pp08.asp>.
- Tarrier, N. (2005). Cognitive behaviour therapy for schizophrenia—a review of development, evidence and implementation. *Psychotherapy and Psychosomatics*, 74, 136–144.
- Tarrier, N. (2008). Schizophrenia and other psychotic disorders. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (4th ed., pp. 463–491). New York, NY: Guilford.
- Tarrier, N., & Wykes, T. (2004). Is there evidence that cognitive behavior therapy is an effective treatment for schizophrenia: A cautious or cautionary tale? *Behaviour Research and Therapy*, 42, 1377–1401.
- Turkington, D., Kingdon, D., & Weiden, P. J. (2006). Cognitive behavior for schizophrenia. *American Journal of Psychiatry*, 163, 365–373.
- Turkington, D., & McKenna, P. (2003). Is cognitive-behavioural therapy a worthwhile treatment for psychosis? *British Journal of Psychiatry*, 182, 477–479.
- Turkington, D., Sensky, T., Scott, J., Barnes, T., Nur, U., Siddler, R., et al. (2008). A randomized controlled trial of cognitive-behavior therapy for persistent symptoms in schizophrenia: A five-year follow-up. *Schizophrenia Research*, 98, 1–7.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: W.W. Norton & Co.
- Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34(3), 523–537.
- Zimmermann, G., Favrod, J., Trieu, V. H., & Pomini, V. (2005). The effect of cognitive behavioral treatment on the positive symptoms of schizophrenia spectrum disorders: A meta-analysis. *Schizophrenia Research*, 77, 1–9.