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Advances in Cognitive Therapy for Schizophrenia: Empowerment and Recovery in the Absence of Insight

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Abstract

Lack of awareness of a mental disorder is a prevalent feature of schizophrenia and is associated with poor outcome. Cognitive therapy (CT) is a promising adjunctive treatment for schizophrenia but is believed to be less efficacious for patients with poor insight. This article describes a goal-oriented CT approach that was innovated to circumvent limited insight in a young woman with severe paranoid delusions and auditory hallucinations. The treatment facilitated recovery by targeting avoidance, inactivity, and social withdrawal, and by promoting detachment from psychotic experiences without directly challenging delusional beliefs. The case study demonstrates the involvement of family in CT and the use of behavioral exercises to modify dysfunctional beliefs and behaviors. Results are consistent with recently advanced cognitive conceptualizations of schizophrenia and suggest that when appropriately tailored and focused on functional goals, CT can promote recovery in the absence of insight.

Keywords

schizophrenia, delusions, psychotherapy, cognitive therapy, low insight

1 Theoretical and Research Basis

Schizophrenia is a chronic disorder associated with significant disability and poor quality of life. Though antipsychotic medications have proven efficacious for treating delusions and hallucinations, a significant proportion of affected individuals continue to experience distressing refractory symptoms, despite optimal pharmacotherapy regimes (Barnes, Buckley, & Schulz, 2003; Kane, 1996). Furthermore, the medications have proven, at most, minimally effective in ameliorating negative symptoms (e.g., affective flattening, avolition, and asociality) or improving the impoverished social and vocational functioning characteristic of the disorder (Swartz et al., 2007).

Cognitive therapy (CT) for schizophrenia has been developed as an adjunctive psychosocial treatment designed to ameliorate maladaptive beliefs and behaviors that maintain symptoms and functional disability. As compared to patients receiving active control treatments, individuals treated with

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cognitive therapy demonstrate reductions in refractory positive symptoms (Zimmermann, Favrod, Trieu, & Pomini, 2005), a diminishing of negative symptoms (Rathod, Kingdon, Weiden, & Turkington, 2008), and improved psychosocial functioning (Granholm et al., 2005).

One of the challenges involved in treating individuals with schizophrenia is limited insight. More than half of the patients show some degree of reduced awareness of having a disorder or will fail to see delusional beliefs and hallucinatory experiences as symptoms (Amador & Kronengold, 2004). Poor insight has been linked to an unfavorable course in schizophrenia, in part, because individuals who do not think they have a disorder are less likely to adhere to pharmacotherapy regimes (David, 2004). It stands to reason that patients who have little awareness of having a mental disorder will also be unlikely to engage in psychosocial treatment and might tend to reject any treatment approach aimed at ameliorating their symptoms. Indeed, there is some evidence that individuals with diminished insight fare less well in clinical trials of cognitive therapy for schizophrenia (Garety et al., 1997), and primary providers are also unlikely to refer low insight patients for the treatment (Kingdon & Kirschen, 2006).

The current article describes a cognitive therapy approach that has been adapted to address frequently encountered challenges such as limited insight and cognitive impairment. The treatment is recovery-focused and goal-oriented; the express aim of therapy is to identify and remove obstacles to the patient's stated functional goals. Traditional reality testing approaches to reduce delusional conviction such as Socratic questioning, evidence-gathering, and cognitive restructuring—which can be quite effective in cases with greater insight—are eschewed in favor of indirect techniques that lessen negative symptoms and improve psychosocial functioning. The increased engagement in productive activity reduces distress and preoccupation associated with delusions and salient hallucinations. The case study illustrates the dynamic interplay between positive and negative symptoms: while it is certainly true that reducing psychosis can lead to psychosocial improvement, the present case illustrates that the opposite path is also viable—improvement in psychosocial functioning can lessen psychosis.

2 Case Presentation

Kate is a 24-year-old Caucasian patient with schizophrenia, paranoid type presenting to a clinical study of cognitive therapy for psychosis. Kate came to the study after being strongly urged to do so by her parents, who were concerned with her functional deterioration since the onset of her disorder 2 years before. She presented well-groomed and friendly but seemed guarded and reluctant to participate in therapy because she was certain she did not have a mental illness. She decided to enroll however with the hope that it might help reduce her stress.

3 Presenting Complaints

Kate's primary problems were paranoid delusions that her former coworkers were constantly monitoring her actions and thoughts and plotting to collect damaging evidence that they could use to turn people against her. She also heard multiple voices which she believed belonged to her coworkers; the voices conversed with each other on a daily basis, sharing disparaging comments about Kate such as "She is a weakling," "She's an awful person," and "Let's get her." Kate reported that these experiences caused her to feel angry, frustrated, hopeless, and psychologically "worn out." She acknowledged the seeming improbability of her experiences ("I know it sounds crazy") but was completely convinced that they were real, despite lengthy arguments with her parents and psychiatrists that left her feeling angry, frustrated, and invalidated. Kate repeatedly anticipated endpoints for her alleged persecution (e.g., "I'm sure they'll give up by the summer") and grew increasingly frustrated as each one passed with no change.

Kate's daily schedule consisted of long periods of time watching TV or surfing the Internet, interspersed with exercising, which she did daily, and occasional outings with her family. She admittedly slept more than she needed to in order to escape being monitored and hearing the voices. She was unemployed and had given up applying for jobs after a string of unsuccessful attempts, and she was completely dependent on her parents for food, shelter, and transportation. Apart from her parents, siblings, and a nearby aunt, Kate was socially isolated and had no friends or romantic partner. Kate did not complain about her isolation but expressed shame over her dependence on her parents, especially since her premorbid functioning was quite good. She was anxious to "get my old life back."

4 History

Kate's parents described her as shy and a "loner." She had small groups of friends in school but as she progressed through high school and then college, she gradually grew more isolated and shunned "typical young adult" activities such as going to parties and drinking because she deemed them immoral. She never had a romantic partner and expressed interest only once in college, only to discover that her feelings were unrequited. Both Kate and her parents described her as a perfectionist. Her parents added that she was always fiercely private and generally preferred to address problems alone.

Academically, Kate performed well in school. After college she moved out of her parents' home and obtained a job in a human resources office, where she received accolades for her high productivity. She became consumed by her work and her parents recall her growing increasingly stressed and depressed. One year into her employment, she developed a belief that her coworkers were monitoring her and that she could hear them talking about her. She became extremely distressed, acted on her delusions by yelling at the voices and searching for people around her apartment complex. She was hospitalized several times over the course of 2 years, each time being discharged with a different medication regimen, with at best moderate improvement. Ultimately she was stabilized on Clozaril, which decreased her distress somewhat, but Kate's positive symptoms remained persistent and her negative symptoms increased. She eventually resigned from work and moved in with her parents.

5 Assessment

Prior to the onset of treatment, Kate was assessed via structured clinical interview that included measures of symptoms, functioning and beliefs, by assessors blind to treatment condition. Her mother provided collateral information that contributed to clinician ratings. Kate was reassessed with the same measures at the end of treatment, 18 months after her intake. Scores for both assessments are displayed in Tables 1 and 2.

At intake, Kate scored close to the maximum possible score on both the voices and delusions subscales of the Psychotic Symptom Rating Scales (PSYRATS; Haddock, McCarron, Tarrier, & Faragher, 1999), a validated interviewer-scored instrument that measures various dimensions of delusions and auditory hallucinations. Regarding negative symptoms, although there was no evidence of reduced verbal expressivity (alogia), Kate showed reduced display of emotion (affective flattening), some withdrawal from constructive activity (avolition/apathy), and significant difficulty engaging in pleasurable and social pursuits (anhedonia/asociality), as evidenced by her scores on the Scale for the Assessment of Negative Symptoms (SANS; Andreasen, 1984), a 25-item interviewer-scored, validated, and widely used measure of negative symptoms (Andreasen et al., 2005). Kate evidenced minimal levels of depression on the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996) and minimal levels of anxiety on the Beck Anxiety

Table 1. Kate's Symptom, Functioning, and Cognitive Insight Scores at Pre- and Posttreatment

	Pretreatment	Posttreatment (18 Months)
Auditory hallucinations	37	25
Delusions	20	15
Negative symptoms		
Affective flattening	6	2
Alogia	0	0
Avolition/apathy	4	0
Anhedonia/asociality	12	5
Depression	12	5
Anxiety	6	4
Psychosocial functioning	14	29
Quality of life	–8	11
Cognitive insight	–8	–1
Self-certainty	13	9
Self-reflectiveness	5	8

Note: Auditory hallucinations = subscale total score, Psychotic Symptom Rating Scales [0:44]; Delusions = subscale total score, Psychotic Symptom Rating Scales [0:24]; Affective flattening = subscale total score, Scale for the Assessment of Negative Symptoms [0:35]; Alogia = subscale total score, Scale for the Assessment of Negative Symptoms [0:20]; Avolition-apathy = subscale total score, Scale for the Assessment of Negative Symptoms [0:15]; Anhedonia-asociality = subscale total score, Scale for the Assessment of Negative Symptoms [0:20]; Depression = total score, Beck Depression Inventory-II [0:63]; Anxiety = total score, Beck Anxiety Inventory [0:63]; Psychosocial functioning = total score, Strauss Carpenter Levels of Function Scale [0:36]; Quality of life = total score, Quality of Life Inventory [–96:96]; Cognitive insight = Beck Cognitive Insight Scale [–18:27]; Self-certainty = Beck Cognitive Insight Scale [0:18]; Self-reflectiveness = Beck Cognitive Insight Scale [0:27].

Inventory (Beck & Steer, 1990), both 21-item measures having been validated in patients with schizophrenia (Addington, Addington, & Maticka-Tyndale, 1993; Steer, Kumar, Pinninti, & Beck, 2003). Her poor level of social and occupational functioning was reflected in a low score on the 9-item interviewer-scored Strauss-Carpenter Levels of Function scale (Strauss & Carpenter, 1974); one of the most commonly used validated questionnaires of functioning. Similarly, the degree of subjective dissatisfaction with her life was reflected in her low score on the Quality of Life Inventory (Frisch, 1994), a validated 32-item self-report instrument that measures subjective functioning on 16 life domains (e.g., love, friends, money, etc.). Kate also completed the Beck Cognitive Insight Scale (BCIS; Beck, Baruch, Balter, Steer, & Warman, 2004), a validated 15-item self-report measure of cognitive insight—the ability to question one's beliefs, consider alternative explanations for one's experiences, and accept that beliefs are fallible. The BCIS measures two dimensions of cognitive insight: (a) self-reflectiveness, which is patients' ability to recognize that their beliefs may be incorrect and that they may have jumped to conclusions and misinterpreted situations in the past, and (b) self-certainty, or patients' overconfidence in their beliefs and resistance to corrective information from other people. Kate's initial scores on the BCIS indicated a lack of mental flexibility with regard to her unusual experiences, consistent with the high degree of conviction in her delusional beliefs.

As Kate started to disclose more about her auditory hallucinations during therapy, her therapist administered the revised Beliefs about Voices Questionnaire (BAVQ-R; Chadwick, Lees, & Birchwood, 2000), which revealed several important beliefs Kate had, including that her former coworkers had a high degree of power over her thoughts because they could read them at will, and that they had a high level of power over her emotions because they brought her down so much. She also attributed her low energy and general negativity to the voices she heard, saying that they made her feel helpless and would cause her to fail in any attempts to work.

Table 2. Kate's PSYRATS Subscale Score

	Pretreatment	Posttreatment (18 Months)
Auditory hallucinations		
Frequency	4	3
Duration	4	2
Location	4	4
Loudness	1	1
Beliefs about origin of voices	4	1
Amount of negative content	4	4
Degree of negative content	3	3
Amount of distress	4	4
Intensity of distress	3	2
Disruption to life	2	0
Ability to control voices	4	1
Delusions		
Amount of preoccupation	4	3
Duration of preoccupation	4	3
Conviction	4	3
Amount of distress	3	3
Intensity of distress	3	3
Disruption to life	2	0

Note: PSYRATS = Psychotic Symptom Rating Scales; Possible range = 0-4; higher scores indicate more severe pathology.

6 Case Conceptualization

The cognitive conceptualization of schizophrenia follows a stress vulnerability model: symptoms arise in the context of psychological vulnerabilities and psychosocial stressors (Beck, Rector, Stolar, & Grant, 2009). Based upon information collected during the intake assessment and initial sessions of therapy, it became clear that Kate had several underlying vulnerabilities predating the onset of her psychosis—shyness, social isolation, and perfectionism. Not being able to live up to her exceedingly high expectations for herself was very stressful, and Kate was working long hours just before her illness onset, adding yet more stress. Her shyness was aggravated by stigmatization from others around the time of her first onset, causing her to retreat from people even more. These factors together appeared to trigger Kate's first onset of psychosis. The 2 years that followed her first break were marked by increasing negative symptoms and worsening functioning, as Kate withdrew from constructive and social activity and became resigned to victimhood.

Kate's psychological vulnerabilities came to structure her symptom presentation. High perfectionism led to self-criticalness, which became dissociated such that she experienced the disparagement in the form of her coworkers' voices putting her down. Analogous to the depressed patient, Kate felt the heavy weight of the critical thoughts and even identified getting rid of her persecutors as the primary goal of therapy, so they would stop holding her back. In the case of the depressed patient, the effective therapeutic intervention is to invert his or her logic: he or she will want to wait for the burdensome criticism to be cleared away before doing anything; however, the best way to reduce self-critical thoughts is to get active (Beck, Rush, Shaw, & Emery, 1979). This depressive intervention was adapted for Kate's psychosis by conveying to her that empowering herself through activity would diffuse the power of her persecutors.

Kate's negative symptoms developed as her shyness predisposed her to withdraw in the face of mounting stress. The cognitive model of negative symptoms posits that dysfunctional beliefs, including negative beliefs about performance (e.g., "If you cannot do something well, there is little point in doing it at all") and negative beliefs triggered by positive symptoms (e.g., "The best way to deal with my voices is to avoid other people and not talk about them") are key factors in the development and maintenance of negative symptoms. Moreover, negative symptoms are thought to function as a maladaptive strategy for protecting patients from the pain and rejection they expect to experience when engaging in constructive activity (Beck et al., 2009). In Kate's case, traumatic persecutory experiences, repeated hospitalizations, failed medication trials, a series of distressing confrontations by doctors about her "mental illness," and repeated failures in finding a job seem to have contributed to the development of several dysfunctional beliefs: (a) "The surveillance, mind-reading, and voices have to stop before I can get my life back in order," (b) "It's better not to work at all than to risk performing poorly or having a meltdown due to the stress caused by my former coworkers," (c) "I can't talk to my parents about what I'm going through because they don't believe me and they just end up worrying." These beliefs probably served to protect Kate from repeated pain and rejection but also perpetuated disengagement and avoidance.

Kate also utilized counterproductive behavioral routines such as a thought suppression technique in which she imagined a red stoplight to block certain thoughts from being read by her former coworkers and used against her. From a cognitive perspective, these routines, referred to as safety behaviors, are supposed to control distressing psychotic experiences; however, safety behaviors actually perpetuate psychosis by preventing disconfirmation of inaccurate underlying beliefs.

7 Course of Treatment and Assessment of Progress

Kate received once weekly CT sessions for 16 months, followed by 5 months of monthly booster sessions. At the start of therapy, Kate and her therapist collaboratively set a list of goals that Kate hoped to achieve, as well as obstacles to those goals. Initial sessions also involved training in stress reduction techniques to help Kate cope with the stress of her symptoms, as well as scheduling and monitoring activities to help decrease her avoidance, inactivity, and isolation, and the resultant preoccupation with her psychotic symptoms. In the middle stage of therapy, various strategies designed to foster Kate's disengagement from her auditory hallucinations were introduced and practiced. Mental imagery and in-session exercises were also implemented to strengthen her skills in this area and to help Kate shed behaviors that maintained her psychosis and distress. In final sessions, the emphasis of therapy shifted to the attainment and maintenance of employment.

Creating a Goal List

The first step of treatment was to identify Kate's goals. Her primary goal of course was to rid herself of her oppressors' presence. Until then, she wanted to cope better with her persecutory experiences, improve her mood, get a job, move back into her own apartment, and participate in more activities. A visual representation of Kate's progress toward her goals, called a progress meter, was designed. Periodically throughout the treatment, she would rate her goal progress from 0 to 100 on the meter; increasing ratings over time helped to keep her motivated in therapy and correct hopeless beliefs such as "nothing is getting better." Kate explained that the surveillance and voices were the main obstacles to most of her goals because they wore her out and drained her of resources needed to achieve her goals. She believed that someday the former

coworkers would give up and go away, but she felt worried and hopeless because they were in her life for 2 years with no sign of leaving.

Directly Questioning Delusions

Kate's therapist was very cautious in attempting to address Kate's delusional beliefs directly in early sessions. When presented with psychoeducational material on the difference between logic-based and intuition-based reasoning and common cognitive distortions, along with questions designed to expose illogicality in Kate's delusional explanations (e.g., "How is it possible that you hear your former coworkers' voices when they are not in the room?"), Kate became defensive and frustrated. These methods were not further pursued, since doing so would likely damage her engagement in treatment. Instead, the focus was shifted from altering her beliefs about the reality of her psychotic experiences to beliefs about their controllability, importance, and the role they played in her life.

Reducing Stress—Getting Power Back

In early sessions, Kate's therapist trained her on simple stress reduction techniques including breathing exercises, progressive muscle relaxation, and mindfulness meditation to help reduce the distress caused by her paranoia and voices and to clinch her tenuous engagement. Kate found these techniques calming and when she practiced them she was less distressed and preoccupied with her auditory hallucinations and thoughts about being monitored. In one session, she stated that the techniques helped to "get my power back." Taking advantage of the opportunity to use the patient's language, the therapist made "getting your power back" the theme for the rest of therapy. Kate was also trained on various behavioral interventions aimed at distracting her from her psychotic experiences, including listening to music with headphones and reading just under her breath. Kate found these behaviors somewhat effective, and her negative belief that she lacked control over the experiences was, accordingly, diminished.

Tracking Experiences and Increasing Activity Level

Self-monitoring was implemented early on in order to collect data on Kate's symptoms. For example, examination of a "surveillance and voices log" revealed that she was more prone to feeling monitored, hearing the voices, and being distressed late at night and when she was alone, suggesting that increased mental and social stimulation could help dampen her distress. Activity scheduling was used to ensure that Kate did not have long periods of idle time during which preoccupation and distress with symptoms could increase. Her therapist guided her in gradually increasing her activities over time, and Kate tracked her activities and the pleasure and mastery derived from them every week on a calendar. Her tracking provided evidence that when she was engaged in constructive and/or social activities, she heard the voices less and was less distressed by them. This in turn made her feel "more power" and a greater sense of control. As time went on, Kate's daily schedule filled out—she started going on more outings with her family, started to reconnect with long-lost friends from college, and got back into her old hobby of cycling again.

Treating Voices as Background Noise

Kate displayed maladaptive behaviors that served to maintain her distress in response to auditory hallucinations, including paying excessive attention to them (e.g., trying to make out what they were saying when they were mumbling), yelling at them, and spending a lot of time thinking

about them. Her therapist explained that these behaviors only served to elevate the voices' importance, relinquish her power, and distract her from her goals. She was advised to treat the voices as meaningless background noise, like a radio station playing static—she could stay home and fixate on the noise, which would irritate her and distract her from working on her goals, or she could simply treat the static as noise and focus on more important things such as hobbies, socializing, and finding a job. Kate liked this analogy and said that it reminded her of a friend of the family who suffered from chronic tinnitus. He was originally depressed about the constant noise but he learned to keep himself busy, focus on more productive matters, and not allow the tinnitus to rule his life.

Explaining That Empowerment Works Whether Voices Are Internal or External

A potential block emerged at this point in treatment. Kate asked if the approach her therapist advocated would be different if it could be proven that her experiences were generated externally. This question presented an excellent opportunity for the therapist to drive home a strategy for counteracting the delusions regarding the voices. Specifically, the therapist said,

> Since I don't have this experience myself, I cannot judge where it originates. Irrespective of the origin, the strategy is exactly the same. By empowering yourself, you make your persecutors less powerful. If others regard you as a wimp, weak and helpless, they will continue to come at you. If you demonstrate that you are capable and effective, this takes the wind out of their sails.

The therapist then proceeded to indicate to the patient how she could put up a strong front: not letting the voices get to her, demonstrating that she is effective by being active, working, making phone calls to friends and so on. This approach has the distinct advantage of allowing the therapist to side-step the patient's strong conviction that the persecutory experiences emanate from an external source, because the tack would be the same whether or not they are real. In theoretical terms, by becoming active and forceful, the patient changes her self-image. Consequently her thinking becomes less judgmental, and she pays less attention to the criticizing thoughts and hallucinations that do occur.

Kate was pleased to hear that the same approaches would be used regardless of the source of her experiences, and her buy-in and adherence to home practice was fairly good throughout therapy.

Neutralizing Voice Content

Initially however, Kate had difficulty moving beyond the content of the voices, so she and her therapist collaboratively constructed statements to neutralize their hateful and insulting content, including reminders of her positive attributes and reminders that the only opinions that matter are those belonging to people she cares about and that care about her, like her family. The therapist explained that the purpose of the strategy was not to convince her oppressors that they were wrong, but rather to remind herself that their messages were false, thus undermining their credibility. Role-plays were conducted in session to practice using these statements: Kate mimicked the voices to her therapist, who then recited neutralizing statements and modeled how to achieve a balance between the ineffective extremes of completely ignoring the voices versus fighting them. The role-play was then reversed, with the therapist playing the role of the voices and Kate practicing the neutralizing statements. Her therapist pointed out instances in which Kate started to slip into fighting the voices she heard by for example, asking them "Why are you doing this?" or insulting them back. She responded well to the correction and began practicing the neutralizing strategies at home, as well.

Skills Building With Imagery and Exposure-Like Exercises

As sessions progressed, Kate's preoccupation with the content of the voices decreased. The focus of therapy then shifted to helping her distance herself from the voices and perceived surveillance as a means of reducing her preoccupation and distress even further. As Kate's proficiency improved, the in-session exposure-like exercises were intensified with mental imagery in order to increase Kate's skill mastery even when highly distressed—that is, turning off the lights in the office and sitting in silence to trigger the experience of hearing voices, having Kate visualize and describe her former coworkers' faces as they talked about her, and visualize the equipment they used to monitor her actions and thoughts. Kate and her therapist also collaboratively developed wallet-sized cards to remind Kate of effective ways to respond when her symptoms or distress would flare up. The cards included statements about how to cope with auditory hallucinations such as "These are just empty words; they mean nothing" and "There is no evidence they can harm me." They also included reminders of goal-facilitating activities that had been effective in redirecting Kate's attention, such as reading, exercising, relaxation exercises, mindfulness meditation, looking online for jobs, and talking to her parents.

Exposure-like exercises were also used to help dismantle behaviors that perpetuated Kate's mind-reading delusions. She was especially worried about critical thoughts she had about people, since she was afraid that her coworkers would find those people and get her into trouble by telling them about what she was thinking. Kate spent considerable time trying to suppress these thoughts by imagining a red stop light when they arose, which she thought would block the thoughts from being picked up by her former coworkers. Kate's therapist educated her about the ineffectiveness of thought suppression and demonstrated that it is counterproductive by asking her to try not to think of a white bear in the room—as predicted, Kate could not get the image of a white bear out of her mind (Wegner, Schneider, Carter, & White, 1987). She was also quite relieved to learn about how common intrusive thoughts are among persons not diagnosed with mental illness. Kate practiced letting go of thought suppression through in-session exercises in which she was instructed to describe former classmates that she disliked in detail, with the rationale being that with repeated practice, she would become desensitized to the stress associated with having critical thoughts.

Facilitating Employment

As Kate became increasingly involved in constructive activity and less preoccupied and distressed by her psychotic symptoms, employment became the primary focus of therapy. Kate's previous efforts at finding a job were halfhearted because she predicted that the stress caused by her symptoms would cause her to fail. However around mid-therapy she again attempted temporary part-time work and found that she felt better while working because her attention was shifted away from her auditory hallucinations and perceived surveillance—her goal of full-time work became more attainable and she felt more hopeful as a result. When Kate's temporary position ended, she started looking for full-time work and her therapist helped by proofreading her resume and conducting mock interviews with her. When Kate obtained a full-time position a few months later, sessions were spent primarily preparing her for this transition by reviewing time management strategies, discussing how to manage her perfectionism, and adjusting her daily schedule so that she could balance work with pleasure. Despite a tense transition, Kate adjusted well to the job and found that her symptom preoccupation and distress decreased significantly when working and was a bit less at home after work as well.

After starting her job and near the end of her treatment, Kate showed hints of insight—she reported that she had been reading about schizophrenia and was open to the possibility that some

aspects of her experiences were internally generated, even though insight had not been addressed directly in treatment.

Involving the Family

Kate consented to having her family involved in therapy—their participation, which entailed two family sessions and numerous phone contacts with the therapist, enhanced the treatment gains. Kate's parents were originally focused on symptom reduction and were disappointed that Kate's paranoia and hallucinations were not remitting. They responded well to the treatment target of recovery—that is, for Kate to have a productive and meaningful life without complete elimination of her symptoms, necessarily. Her parents also expressed disappointment that Kate did not speak to them much about personal matters. Kate expressed that sharing with her parents would lead them to worry needlessly. However, they explained that by not hearing how things were going for her they actually worried more and felt helpless. The family agreed to meet weekly to check-in with each other and allow Kate to share her feelings. A significant source of distress for Kate was that her parents did not seem to believe that her actions and thoughts were being monitored, nor that the voices she heard were externally generated. This was a thorny issue for the parents, who did not know exactly how to respond to Kate, and they often wondered if they should confront her with their conviction that these were symptoms of her mental illness. The therapist advised them against confrontation. Rather, the parents were urged to be honest: because they do not have the same experiences as Kate (e.g., hearing voices), it is difficult to reach the same conclusion, but they could see and empathize with the very real stress that resulted from her experiences. Kate accepted this middle-ground approach and her parents were relieved that they did not have to choose between the extremes of agreeing with her delusional beliefs or forcibly contradicting them. Kate's parents were also kept apprised of the general approaches introduced in therapy so that they could encourage and support her at-home practice.

8 Complicating Factors

Two complicating factors were addressed in Kate's treatment. First, she had a tendency to underreport her symptoms and distress. This was apparent, for example, in discrepancies between ratings on anxiety and depression measures, her presentation in sessions, and her parents' report of her mood at home. She was also quite guarded about her psychotic symptoms, especially in early sessions. For example, she greatly hesitated telling her therapist details about the mind-reading, saying that it was embarrassing because it sounded so unbelievable. Her therapist expressed a genuine need to fully understand her experiences in order to be able to help her and explained that therapy was one place she did not have to worry about being judged. Also, her therapist added, the more Kate talked about her experiences, the less uncomfortable it would be, and the more mastery she would have over them. Kate's comfort and disclosure improved but she continued to need encouragement. A second complication involved Kate's high degree of conviction and sensitivity to being judged as having a mental illness. The therapist strived to operate from within Kate's belief system and avoid confrontation but at the same time avoided colluding with her delusional beliefs (Nelson, 2005).

9 Managed Care Considerations

None.

10 Follow-Up

Kate participated in a total of 66 sessions of CT. As of her last booster session, she was still working successfully full-time. Kate was assessed 5 months after completing the weekly phase of treatment, by an assessor blind to her treatment assignment (see Table 1). Kate's test scores indicated reductions in negative symptoms and substantial improvements in functioning and subjective quality of life. Her largest positive symptom improvements (based on PSYRATS subscale scores; see Table 2) were on the disruption to her life caused by auditory hallucinations and delusional beliefs and her perceived sense of control over the voices. In addition, the frequency of her experience of hearing voices decreased slightly between intake and follow-up and their duration dropped quite a bit, from hours at a time at intake to only several minutes at a time at follow-up. Similarly, she evidenced reductions in her preoccupation with her paranoid beliefs.

These findings corroborated Kate's perception of her progress. She stated that though she found her job to be demanding and stressful at times, she was too busy to think about the alleged persecutors while working and hours would pass in which she would barely think about them. She also described an increased sense of empowerment and optimism that was in stark contrast to her hopelessness and view of herself as a victim at the start of treatment ("I've learned to live with it. I know I can be successful even if it doesn't go away. I think it's important to open up my world a little bit.") Kate's parents confirmed these improvements and added that she seemed "happier and more present and connected with other people." She was socializing with her new coworkers and had gone on a date recently.

Interestingly, Kate's scores also suggested a softening in conviction and growing mental flexibility—her delusional conviction ratings on the PSYRATS were decreased at follow-up, while self-certainty on the BCIS decreased and self-reflectiveness increased over the course of treatment. These findings are consistent with her comments near the end of treatment about entertaining the possibility of having schizophrenia.

11 Treatment Implications of the Case

Ideally, CT for schizophrenia follows a two-pronged approach: improving reality-testing by examining and correcting the cognitive biases and dysfunctional beliefs that serve to maintain delusions and hallucinations, while at the same time promoting empowerment and decreasing preoccupation with psychotic symptoms by targeting negative symptoms and functioning. In the case of Kate, we opted to focus upon empowerment in the absence of reality-testing techniques due to her poor insight and complete delusional conviction. And, indeed, this is the most significant point illustrated by this case: psychological intervention can be adapted to successfully treat patients with schizophrenia who lack insight. While early research on cognitive therapy for schizophrenia found that inability to entertain alternatives to delusions predicted poor response to the treatment (Garety et al., 1997), the present case suggests that such patients can be effectively treated if therapy is appropriately tailored to them. And, in terms of adapting the treatment, this case also illustrates that the cognitive formulation of negative symptoms provides a useful roadmap. Kate's negative symptoms appeared to protect her from predicted negative outcomes—for example, she was only halfheartedly looking for a job because she believed that she would fail due to her symptoms. By helping Kate to engage in more constructive and pleasurable activities, the dysfunctional beliefs that fueled her negative symptoms and hopelessness could be modified and her overarching belief that life had to be put on hold until her symptoms remitted was disproved.

A third point is the importance of experiential learning in driving both behavior change and belief modification, especially as relating to psychotic symptoms. As Kate emerged from her

shell of avoidance and defeat and engaged in new activities, she collected evidence that helped disconfirm her belief that she had no control over her auditory hallucinations. She also learned how to relate differently to her symptoms by adopting a more detached view of them and redirecting her attention and effort to activities that were more conducive to her goals, such as job-searching; as a result, she shifted from a position of resignation to empowerment. And, this shift illustrates the final point, recovery. As Bellack (2006) has observed, CT is consistent with the recovery model of schizophrenia, which involves improvement in vocational functioning, independent living, and social relationships (Liberman, Kopelowicz, Ventura, & Gutkind, 2002; Ralph & Corrigan, 2005). In Kate's case, the focus was on helping her achieve functional goals that were personally meaningful to her; symptoms were addressed as problems that interfered with those goals rather than as intrinsic problems. Despite the fact that she still heard voices and believed that she was being monitored at the end of treatment, Kate's functioning was considerably improved and, importantly, she experienced greater life satisfaction.

12 Recommendations to Clinicians and Students

This case demonstrates that CT can be effective in facilitating recovery in patients with no insight, which is usually thought to be a poor prognostic indicator in the treatment of schizophrenia (David, 2004), and that positive symptoms can be reduced indirectly by reducing negative symptoms. Several recommendations for the treatment of patients with schizophrenia can be derived from Kate's case. First, schizophrenia is a disorder with a highly variable presentation, so it is important to customize CT for each patient, as Kate's therapist did in order to circumvent her limited insight. Second, the case included several examples of using behavioral techniques to stimulate cognitive change (e.g., working part-time to correct the belief that Kate would fail at work due to her symptoms); dysfunctional beliefs and assumptions can be enduringly modified through experiences that are carefully conceived and interpreted. Similarly, Kate's treatment also demonstrates the importance of in-session behavioral exercises. Role-plays and exposure-like techniques provide the opportunity to assess patients' behavior and cognitions firsthand and to practice new ways of thinking and acting, and making modifications if necessary. In addition, including the patients' family in the therapy process and having an extended duration of treatment can help enhance outcome.

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