

CHAPTER 3

Schizophrenia with Paranoid Delusions

Bill McClary made his first appointment at the mental health center reluctantly. He was 25 years old, single, and unemployed. His sister, Colleen, with whom he had been living for 18 months, had repeatedly encouraged him to seek professional help. She was concerned about his peculiar behavior and social isolation. He spent most of his time daydreaming, often talked to himself, and occasionally said things that made little sense. Bill acknowledged that he ought to keep more regular hours and assume more responsibility, but he insisted that he did not need psychological treatment. The appointment was finally made in an effort to please his sister and mollify her husband, who was worried about Bill's influence on their three young children.

During the first interview, Bill spoke quietly and frequently hesitated. The therapist noted that Bill occasionally blinked and shook his head as though he was trying to clear his thoughts or return his concentration to the topic at hand. When the therapist commented on this unusual twitch, Bill apologized politely but denied that it held any significance. He was friendly yet shy and clearly ill at ease. The discussion centered on Bill's daily activities and his rather unsuccessful efforts to fit into the routine of Colleen's family. Bill assured the therapist that his problems would be solved if he could stop daydreaming. He also expressed a desire to become better organized.

Bill continued to be guarded throughout the early therapy sessions. After several weeks, he began to discuss his social contacts and mentioned a concern about sexual orientation. Despite his lack of close friends, Bill had had some limited and fleeting sexual experiences. These had been both heterosexual and homosexual in nature. He was worried about the possible meaning and consequences of his encounters with other males. This topic occupied the next several weeks of therapy.

Bill's "daydreaming" was also pursued in greater detail. It was a source of considerable concern to him, and it interfered significantly with his daily activities. This experience was difficult to define. At frequent, though irregular, intervals throughout the day, Bill found himself distracted by intrusive and

repetitive thoughts. The thoughts were simple and most often alien to his own value system. For example, he might suddenly think to himself, "Damn God." Recognizing the unacceptable nature of the thought, Bill then felt compelled to repeat a sequence of self-statements that he had designed to correct the initial intrusive thought. He called these thoughts and his corrective incantations "scruples." These self-statements accounted for the observation that Bill frequently mumbled to himself. He also admitted that his unusual blinking and head shaking were associated with the experience of intrusive thoughts.

Six months after Bill began attending the clinic regularly, the therapist received a call from Bill's brother-in-law, Roger. Roger said that he and Bill had recently talked extensively about some of Bill's unusual ideas, and Roger wanted to know how he should respond. The therapist was, in fact, unaware of any such ideas. Instead of asking Roger to betray Bill's confidence any further, the therapist decided to ask Bill about these ideas at their next therapy session. It was only at this point that the therapist finally became aware of Bill's extensive delusional belief system.

For reasons that will become obvious, Bill was initially reluctant to talk about the ideas to which his brother-in-law had referred. Nevertheless, he provided the following account of his beliefs and their development. Shortly after moving to his sister's home, Bill realized that something strange was happening. He noticed that people were taking special interest in him and often felt that they were talking about him behind his back. These puzzling circumstances persisted for several weeks during which Bill became increasingly anxious and suspicious. The pieces of the puzzle finally fell in place late one night as Bill sat in front of the television. In a flash of insight, Bill suddenly came to believe that a group of conspirators had secretly produced and distributed a documentary film about his homosexual experiences. Several of his high school friends and a few distant relatives had presumably used hidden cameras and microphones to record each of his sexual encounters with other men. Bill believed that the film had grossed over \$120 million at the box office and that this money had been sent to the Irish Republican Army to buy arms and ammunition. He therefore held himself responsible for the deaths of dozens of people who had died as the result of several recent bombings in Ireland. This notion struck the therapist and Bill's brother-in-law as being quite preposterous, but Bill's conviction was genuine. He was visibly moved as he described his guilt concerning the bombings. He was also afraid that serious consequences would follow his confession. Bill believed that the conspirators had agreed to kill him if he ever found out about the movie. This imagined threat had prevented Bill from confiding in anyone prior to this time. It was clear that he now feared for his life.

Bill's fear was exacerbated by the voices that he had been hearing for the past several weeks. He frequently heard male voices discussing his sexual behavior and arguing about what action should be taken to punish him. They were not voices of people with whom Bill was personally familiar, but they were always males and they were always talking about Bill. For example, one night when Bill was sitting

alone in his bedroom at Colleen's home, he thought he overheard a conversation in the next room. It was a heated argument in which one voice kept repeating "He's a goddamned faggot, and we've got to kill him!" Two other voices seemed to be asking questions about what he had done and were arguing against the use of such violence. Bill was, of course, terrified by this experience and sat motionless in his room as the debate continued. When Roger tapped on his door to ask if he was all right, Bill was certain that they were coming to take him away. Realizing that it was Roger and that he had not been part of the conversation, Bill asked him who was in the next room. Roger pointed out that two of the children were sleeping in the next room. When Bill went to check, he found the children asleep in their beds. These voices appeared at frequent but unpredictable intervals almost every day. It was not clear whether or not they had first appeared before the development of Bill's delusional beliefs.

The details of the delusional system were quite elaborate and represented a complex web of imaginary events and reality. For example, the title of the secret film was supposedly *Honor Thy Father*, and Bill said his name in the film was Gay Talese. *Honor Thy Father* was, in fact, a popular novel that was written by Gay Talese and published several years prior to the development of Bill's delusion. The actual novel was about organized crime, but Bill denied any knowledge of this "other book with the same title." According to Bill's belief system, the film's title alluded to Bill's disrespect for his own father, and his own name in the film was a reference to his reputation as a "gay tease." He also maintained that his own picture had been on the cover of *Time* magazine within the past year with the name Gay Talese printed at the bottom.

An interesting array of evidence was marshaled in support of this delusion. For example, Bill pointed to the fact that he had happened to meet his cousin accidentally on a subway in Brooklyn 2 years earlier. Why, Bill asked, would his cousin have been on the same train if he were not making a secret film about Bill's private life? In Bill's mind, the cousin was clearly part of a continuous surveillance that had been carefully arranged by the conspirators. The fact that Bill came from a very large family and that such coincidences were bound to happen did not impress him as a counterargument. Bill also pointed to an incident involving the elevator operator at his mother's apartment building as further evidence for the existence of the film. He remembered stepping onto the elevator one morning and having the operator give him a puzzled, prolonged glance. The man asked him if they knew each other. Bill replied that they did not. Bill's explanation for this mundane occurrence was that the man recognized Bill because he had obviously seen the film recently; he insisted that no other explanation made sense. Once again, coincidence was absolutely impossible. His delusional system had become so pervasive and intricately woven that it was no longer open to logical refutation. He was totally preoccupied with the plot and simultaneously so frightened that he did not want to discuss it with anyone. Thus, he had lived in private fear, brooding about the conspiracy and helpless to prevent the conspirators from spreading knowledge of his shameful sexual behavior.

Social History

Bill was the youngest of four children. He grew up in New York City where his father worked as a firefighter. Both of his parents were first-generation Irish Americans. Many of their relatives were still living in Ireland. Both parents came from large families. Bill's childhood memories were filled with stories about the family's Irish heritage.

Bill was always much closer to his mother than to his father, whom he remembered as being harsh and distant. When his parents fought, which they did frequently, Bill often found himself caught in the middle. Neither parent seemed to make a serious effort to improve their relationship. Bill later learned that his father had carried on an extended affair with another woman. His mother depended on her own mother, who lived in the same neighborhood, for advice and support and would frequently take Bill with her to stay at her parents' apartment after particularly heated arguments. Bill grew to hate his father, but his enmity was tempered by guilt. He had learned that children were supposed to respect their parents and that, in particular, a son should emulate and revere his father. Mr. McClary became gravely ill when Bill was 12 years old, and Bill remembered wishing that his father would die. His wish came true. Years later, Bill looked back on this sequence of events with considerable ambivalence and regret.

Bill could not remember having any close friends as a child. Most of his social contacts were with cousins, nephews, and nieces. He did not enjoy their company or the games that other children played. He remembered himself as a clumsy, effeminate child who preferred to be alone or with his mother instead of with other boys.

He was a good student and finished near the top of his class in high school. His mother and the rest of the family seemed certain that he would go on to college, but Bill could not decide on a course of study. The prospect of selecting a profession struck Bill as an ominous task. How could he be sure that he wanted to do the same thing for the rest of his life? He decided that he needed more time to ponder the matter and took a job as a bank clerk after graduating from high school.

Bill moved to a small efficiency apartment and seemed to perform adequately at the bank. His superiors noted that he was reliable, though somewhat eccentric. He was described as quiet and polite; his reserved manner bordered on being socially withdrawn. He did not associate with any of the other employees and rarely spoke to them beyond the usual exchange of social pleasantries. Although he was not in danger of losing his job, Bill's chances for advancement were remote. This realization did not perturb Bill because he did not aspire to promotion in the banking profession. It was only a way of forestalling a serious career decision. After 2 years at the bank, Bill resigned. He had decided that the job did not afford him enough time to think about his future.

He was soon able to find a position as an elevator operator. Here, he reasoned, was a job that provided time for thought. Over the next several months, he gradually became more aloof and disorganized. He was frequently late to work and

seemed unconcerned about the reprimands that he began receiving. Residents at the apartment house described him as peculiar. His appearance was always neat and clean, but he seemed preoccupied most of the time. On occasion he seemed to mumble to himself, and he often forgot floor numbers to which he seemed directed. These problems continued to mount until he was fired after working for 1 year at this job.

During the first year after finishing high school, while working at the bank, Bill had his first sexual experience. A man in his middle forties who often did business at the bank invited Bill to his apartment for a drink, and they became intimate. The experience was moderately enjoyable but primarily anxiety provoking. Bill decided not to see this man again. Over the next 2 years, Bill experienced sexual relationships with a small number of other men as well as with a few women. In each case, it was Bill's partner who took the initiative. Only one relationship lasted more than a few days. He became friends with a woman named Patty who was about his own age, divorced, and the mother of a 3-year-old daughter. Bill enjoyed being with Patty and her daughter and occasionally spent evenings at their apartment watching television and drinking wine. Despite their occasional sexual encounters, this relationship never developed beyond the casual stage at which it began.

After he was fired from the job as an elevator operator, Bill moved back into his mother's apartment. He later recalled that they made each other anxious. Rarely leaving the apartment, Bill sat around the apartment daydreaming in front of the television. When his mother returned from work, she would clean, cook, and coax him unsuccessfully to enroll in various kinds of job-training programs. His social isolation was a constant cause of concern for her. She was not aware of his bisexual interests and encouraged him to call women that she met at work and through friends. The tension eventually became too great for both of them, and Bill decided to move in with Colleen, her husband, and their three young children.

Conceptualization and Treatment

Bill's adjustment problems were obviously extensive. He had experienced serious difficulties in the development of social and occupational roles. From a diagnostic viewpoint, Bill's initial symptoms pointed to schizotypal personality disorder. In other words, before his delusional beliefs and hallucinations became manifest, he exhibited a series of peculiar characteristics in the absence of floridly psychotic symptoms. These included several of the classic signs outlined by Meehl (1964): anhedonia (the inability to experience pleasure), interpersonal aversiveness, and ambivalence. Bill seldom, if ever, had any fun. Even his sexual experiences were described in a detached, intellectual manner. He might indicate, for example, that he had performed well or that his partner seemed satisfied, but he never said things like, "It was terrific," or "I was really excited!" He strongly preferred to be alone. When Colleen and Roger had parties, Bill became anxious and withdrew to his room, explaining that he felt ill.

Bill's ambivalence toward other people was evident in his relationship with his therapist. He never missed an appointment; in fact, he was always early and seemed to look forward to the visits. Despite this apparent dependence, he seemed to distrust the therapist and was often guarded in his response to questions. He seemed to want to confide in the therapist and was simultaneously fearful of the imagined consequences. Bill's pattern of cognitive distraction was somewhat difficult to interpret. His "scruples" were, in some ways, similar to obsessive thoughts, but they also bore a resemblance to one of Schneider's (1959) first-rank symptoms of schizophrenia—thought insertion. Considering this constellation of problems, it was clear that Bill was in need of treatment, but it was not immediately obvious that he was psychotic. The therapist decided to address Bill's problems from a cognitive-behavioral perspective. The ambiguity surrounding his cognitive impairment seemed to warrant a delay regarding the use of medication.

The beginning therapy sessions were among the most difficult. Bill was tense, reserved, and more than a bit suspicious. Therapy had been his sister's idea, not his own. The therapist adopted a passive, nondirective manner and concentrated on the difficult goal of establishing a trusting relationship with Bill. In the absence of such an atmosphere, it would be impossible to work toward more specific behavioral changes.

Many of the early sessions were spent discussing Bill's concerns about homosexuality. The therapist listened to Bill's thoughts and concerns and shared various bits of information about sexuality and homosexual behavior in particular. As might be expected, Bill was afraid that homosexual behavior per se was a direct manifestation of psychological disturbance. He also wondered about his motivation to perform sexual acts with other men and expressed some vague hypotheses about this being a reflection of his desire to have a closer relationship with his father. The therapist assured Bill that the gender of one's sexual partner was less important than the quality of the sexual relationship. In fact, the therapist was most concerned about Bill's apparent failure to enjoy sexual activity and his inability to establish lasting relationships. Instead of trying to eliminate the possibility of future homosexual encounters or to impose an arbitrary decision based on prevailing sexual norms, the therapist tried to (a) help Bill explore his own concerns about the topic, (b) provide him with information that he did not have, and (c) help him develop skills that would improve his social and sexual relationships, whether they involved men or women.

As their relationship became more secure, the therapist adopted a more active, directive role. Specific problems were identified, and an attempt was made to deal with each sequentially. The first area of concern was Bill's daily schedule. The therapist enlisted Colleen's support. Together with Bill, they instituted a sequence of contingencies designed to integrate his activities with those of the family. For example, Colleen called Bill once for breakfast at 7:30 A.M. If he missed eating with everyone else, Colleen went on with other activities and did not make him a late brunch as she had done prior to this arrangement. In general, the therapist taught Colleen to reinforce appropriate behavior and to ignore inappropriate

behavior as much as possible. Over the initial weeks, Bill did begin to keep more regular hours.

After several weeks of work, this home-based program began to produce positive changes. Bill was following a schedule closer to that of the rest of the family and was more helpful around the house. At this point, the therapist decided to address two problems that were somewhat more difficult: Bill's annoying habit of mumbling to himself and his lack of social contacts with peers. Careful interviews with Bill and his sister served as a base for a functional assessment of the self-talk. This behavior seemed to occur most frequently when Bill was alone or thought he was alone. He was usually able to control his scruples in the presence of others; if he was particularly disturbed by a distracting thought, he most often excused himself and retired to his room. Colleen's response was usually to remind Bill that he was mumbling and occasionally to scold him if he was talking loudly. Given the functional value of Bill's scruples in reducing his anxiety about irreverent thoughts, it seemed unlikely that the self-talk was being maintained by this social reinforcement.

The therapist decided to try a stimulus-control procedure. Bill was instructed to select one place in the house in which he could daydream and talk to himself. Whenever he felt the urge to daydream or repeat his scruples, he was to go to this specific spot before engaging in these behaviors. It was hoped that this procedure would severely restrict the environmental stimuli that were associated with these asocial behaviors and thereby reduce their frequency. Bill and the therapist selected the laundry room as his daydreaming room because it was relatively secluded from the rest of the house. His bedroom was ruled out because the therapist did not want it to become a stimulus for behaviors that would interfere with sleeping. Colleen was encouraged to prompt Bill whenever she noticed him engaging in self-talk outside of the laundry room. The program seemed to have modest, positive results, but it did not eliminate self-talk entirely.

Interpersonal behaviors were also addressed from a behavioral perspective. Since moving to his sister's home, Bill had not met any people his own age and had discontinued seeing his friends in New York City. Several avenues were pursued. He was encouraged to call his old friends and, in particular, to renew his friendship with Patty. The therapist spent several sessions with Bill rehearsing telephone calls and practicing conversations that might take place. Although Bill was generally aware of what things he should say, he was anxious about social contacts. This form of behavioral rehearsal was seen as a way of exposing him gradually to the anxiety-provoking stimuli. He was also given weekly homework assignments involving social contacts at home. The therapist discussed possible sources of friends, including a tavern not far from Colleen's home and occasional parties that Colleen and Roger had for their friends. This aspect of the treatment program was modestly effective. Bill called Patty several times and arranged to stay with his mother for a weekend so that he could visit with Patty and her daughter. Although he was somewhat anxious at first, the visit was successful and seemed to lift

Bill's spirits. He was more animated during the following therapy session and seemed almost optimistic about changing his current situation.

It was during one of their visits to the neighborhood tavern that Bill first mentioned the imagined movie to Roger. When the therapist learned of these ideas, and the auditory hallucinations, he modified the treatment plan. He had initially rejected the idea of antipsychotic medication because there was no clear-cut evidence of schizophrenia. Now that psychotic symptoms had appeared, an appointment was arranged with a psychiatrist who agreed with the diagnosis and prescribed risperidone (Risperdal), one of the atypical (or "second-generation") antipsychotic drugs. Because Bill's behavior was not considered dangerous and his sister was able to supervise his activities closely, hospitalization was not necessary. All other aspects of the program were continued.

Bill's response to the medication was positive but not dramatic. The most obvious effect was on his self-talk, which was reduced considerably over a 4-week period. Bill attributed this change to the virtual disappearance of the annoying, intrusive thoughts. His delusions remained intact, however, despite the therapist's attempt to encourage a rational consideration of the evidence. The following example illustrates the impregnable quality of delusional thinking as well as the naiveté of the therapist.

One of Bill's ideas was that his picture had been on the cover of *Time* magazine. This seemed like a simple idea to test, and Bill expressed a willingness to try. Together they narrowed the range of dates to the last 8 months. The therapist then asked Bill to visit the public library before their next session and check all issues of *Time* during this period. Of course, Bill did not find his picture. Nevertheless, his conviction was even stronger than before. He had convinced himself that the conspirators had seen him on his way to the library, beaten him there, and switched magazine covers before he could discover the original. Undaunted, the therapist recommended two more public libraries for the next week. As might have been expected, Bill did not find his picture at either library but remained convinced that the cover had appeared. Every effort to introduce contradictory evidence was met by this same stubborn resistance.

Over the next several weeks, Bill became somewhat less adamant about his beliefs. He conceded that there was a chance that he had imagined the whole thing. It seemed to him that the plot probably did exist and that the movie was, in all likelihood, still playing around the country, but he was willing to admit that the evidence for this belief was less than overwhelming. Although his suspicions remained, the fear of observation and the threat of death were less immediate, and he was able to concentrate more fully on the other aspects of the treatment program. Hospitalization did not become necessary, and he was able to continue living with Colleen's family. Despite important improvements, it was clear that Bill would continue to need a special, supportive environment, and it seemed unlikely that he would assume normal occupational and social roles, at least not in the near future.

Discussion

The diagnostic hallmarks of schizophrenia are hallucinations, delusions, and disturbances in affect and thought. *DSM-5* (APA, 2013, p. 99) requires that an individual experience at least two of the following symptoms for at least 1 month: delusions, hallucinations, disorganized speech, disorganized behavior, or negative symptoms such as avolition or blunted affect. This individual must also experience social or occupational dysfunction. Symptoms must last at least 6 months. Individuals may go through periods within the 6-month time frame in which they experience negative symptoms, but not positive ones (such as hallucinations or delusions).

Bill clearly fit the diagnostic criteria for schizophrenia. Prior to the expression of his complex, delusional belief system, he exhibited several of the characteristics of a *prodromal phase*. He had been socially isolated since moving to his sister's home. Although he did interact with his sister and her family, he made no effort to stay in touch with the few friends he had known in New York City, nor did he attempt to meet new friends in the neighborhood. In fact, he had never been particularly active socially, even during his childhood. His occupational performance had deteriorated long before he was fired from his job as an elevator operator. Several neighbors had complained about his peculiar behavior. For example, one of Colleen's friends once called to tell her that she had been watching Bill as he walked home from the grocery store. He was carrying a bag of groceries, clearly mumbling to himself, and moving in a strange pattern. He would take two or three steps forward, then one to the side onto the grass next to the sidewalk. At this point, Bill would hop once on his left foot, take one step forward, and then step back onto the sidewalk and continue the sequence. Thinking that this behavior seemed similar to games that children commonly play, Colleen asked Bill about his walk home. He told her that each of these movements possessed a particular meaning and that he followed this pattern to correct scruples that were being placed in his head as he returned from the store. This explanation, and his other comments about his scruples, would be considered an example of magical thinking. Overall, Bill's delusional beliefs and auditory hallucinations can be seen as an extension of the deterioration that began much earlier.

Schizophrenia is a relatively common disorder, affecting approximately 1 to 2 percent of the population (Messias, Chen, & Eaton, 2007; Wu, Birnbaum, Hudson, & Kessler, 2006). Although gender differences in prevalence are not large, the disorder may affect more men than women. Onset usually occurs during adolescence or early adulthood, but somewhat later for women than for men. The prognosis is mixed. When Emil Kraepelin first defined the disorder (originally known as *dementia praecox*), he emphasized its chronic deteriorating course. Many patients do, in fact, show a gradual decline in social and occupational functioning and continue to exhibit psychotic symptoms either continuously or intermittently throughout their lives. However, a substantial number of patients seem to recover without

signs of residual impairment. The results of several studies indicate that roughly 60 percent of schizophrenic patients follow a chronic pattern, and approximately 25 percent recover within several years after the onset of the disorder (Heiden & Häfner, 2000).

DSM-5 eliminated the schizophrenia subtypes: catatonic, paranoid, hebephrenic, and simple. Symptomatically defined subgroups possessed a certain intuitive appeal, but they did not prove to be particularly useful in other respects (Helmes & Landmark, 2003). One major problem was the lack of reliability in assigning patients to subcategories. Because of problems in identifying the general category of schizophrenia, it was not surprising that the subtypes presented further difficulties. Inconsistency was another drawback; patients who exhibited a particular set of prominent symptoms at one point in time may exhibit another set of features during a later episode. The symptomatically defined subgroups had also not been shown to possess either etiological or predictive validity. For example, a specific treatment that is more or less effective with catatonic patients in comparison with hebephrenics has not been found.

Another system for subdividing schizophrenic patients is based on the use of three symptom dimensions: psychotic symptoms, negative symptoms, and disorganization (Andreasen, Arndt, Alliger, Miller, & Flaum, 1995; O'Leary et al., 2000). Psychotic symptoms include hallucinations and delusions. Negative symptoms include blunted or restricted affect, social withdrawal, and poverty of speech. Verbal communication problems, such as disorganized speech and bizarre behavior, are included in the third symptom dimension, which is called *disorganization*. The distinctions among psychotic, negative, and disorganized symptom dimensions have generated a considerable amount of interest and research.

Etiological Considerations

Genetic factors are clearly involved in the transmission of schizophrenia (Mitchell & Porteous, 2010). The most persuasive data supporting this conclusion come from twin studies and investigations following various adoption methods. Twin studies depend on the following reasoning: monozygotic (MZ) twins develop from a single zygote, which separates during an early stage of growth and forms two distinct but genetically identical embryos. In the case of dizygotic (DZ) twins, two separate eggs are fertilized by two sperm cells, and both develop simultaneously. Thus, DZ twins share only, on average, 50 percent of their genes, the same as siblings who do not share the same prenatal period. Based on the assumption that both forms of twins share similar environments, MZ twins should manifest a higher concordance rate (i.e., more often resemble each other) for traits that are genetically determined. This is, in fact, the pattern that has now been reported for schizophrenia over a large number of studies (Pogue-Geile & Gottesman, 2007). For example, one study conducted in Finland reported a concordance rate of 46 percent for MZ twins and only 9 percent among DZ twins (Cannon,

Kaprio, Loennqvist, Huttunen, & Koskenvuo, 1998). This substantial difference between MZ and DZ concordance indicates the influence of genetic factors. On the other hand, the absence of 100 percent concordance among the MZ twins also indicates that genetic factors do not account for all of the variance. The development of the disorder must, therefore, depend on a dynamic interaction between a genetically determined predisposition and various environmental events (Gottesman & Hanson, 2005).

We do not know how genetic factors interact with environmental events to produce schizophrenia. This problem is enormously complex because the environmental events in question might take any of several different forms (Walker, Kestler, Bollini, & Hochman, 2004). Some investigators have focused on factors such as nutritional deficiencies or viral infections. One hypothesis suggests that prenatal infections increase vulnerability to schizophrenia by disrupting brain development in the fetus (Brown & Derkits, 2010). Another approach to environmental events and vulnerability to schizophrenia has focused on interpersonal relations within the family. Adverse family circumstances during childhood may increase the probability of subsequently developing schizophrenia among people who are genetically predisposed toward the disorder (Schiffman et al., 2001).

In addition to questions about the causes of the disorder, a considerable amount of research has also stressed the family's influence on the course of the disorder. These studies follow the progress of patients who have already been treated for schizophrenia, and they are concerned with expressed emotion (EE), or the extent to which at least one family member is extremely critical of the patient and his or her behavior. The patients are typically followed for several months after discharge from the hospital, and the outcome variable is the percentage of patients who return to the hospital for further treatment. Relapse rates are much higher for patients who returned to high EE homes (Aguilera, López, Breitborde, Kopelowicz, & Zarate, 2010; Hooley, 2007).

The data regarding expressed emotion are consistent with Bill's experience. Bill remembered that when he and his mother were living together, they made each other anxious. His descriptions of her behavior indicate that her emotional involvement was excessive, given that he was an adult and capable of greater independence; she was always worried about his job, or his friends, or what he was doing with his time. Her constant intrusions and coaxing finally led him to seek refuge with his sister's family.

The supportive environment provided by Colleen and her family and their willingness to tolerate many of Bill's idiosyncrasies were undoubtedly helpful in allowing Bill to remain outside a hospital during his psychotic episodes.

Treatment

There are several important variables to consider in selecting a treatment for acute schizophrenic disturbance. Antipsychotic drugs have become the principal form of intervention since their introduction in the 1950s (Haddad, Taylor, & Niaz, 2009).

A large number of carefully controlled studies have demonstrated that these drugs have a beneficial effect for many patients with schizophrenia. They lead to an improvement in symptoms during acute psychotic episodes. Antipsychotic medications also reduce the probability of symptom relapse if they are taken on a maintenance basis after the patient has recovered from an episode. Unfortunately, some patients, perhaps as many as 25 percent, do not respond positively to antipsychotic medication.

Antipsychotic medication seems to have a specific effect on many psychotic symptoms, such as hallucinations and disorganized speech. In Bill's case, medication did have a positive effect. The administration of antipsychotic medication was associated with an improvement in his most dramatic symptoms.

Despite these positive effects, there are also several limitations and some problems associated with the use of antipsychotic drugs. One problem, which was evident in Bill's case, is that medication is only a partial solution. Once the most dramatic symptoms have improved, most patients continue to suffer from role impairments that are not the direct product of hallucinations and delusions. In short, medication can sometimes relieve perceptual aberrations, but it does not remove deficiencies in social and occupational skills.

Another problem arises with treatment-refractory patients. Approximately 10 to 20 percent of schizophrenic patients do not benefit from traditional forms of antipsychotic medication (Kane, 1996). Others who respond initially will relapse repeatedly during maintenance drug treatment. Therefore, pharmaceutical companies continue to develop new forms of medication. Clozapine (Clozaril) and risperidone (Risperdal) are examples of the so-called second generation of antipsychotic drugs. They are also known as *atypical antipsychotic* drugs because they produce fewer adverse side effects and seem to have a different pharmacological mode of action than more traditional antipsychotic drugs. Controlled studies of clozapine and risperidone have found significant improvement in approximately 30 percent of patients who were previously considered "treatment resistant" (Turner & Stewart, 2006). The availability of these new forms of medication offers new hope for many patients and their families.

A final problem has been the development of long-term side effects, most notably a serious, involuntary movement disorder known as *tardive dyskinesia*. The most obvious signs of tardive dyskinesia include trembling of the extremities, lip smacking, and protrusions of the tongue. These symptoms can be disconcerting to both patients and those with whom they interact. Fortunately, atypical antipsychotic drugs are less likely to lead to the development of motor side effects such as tardive dyskinesia (Kane, 2004).

Psychosocial treatment programs are also beneficial for patients with schizophrenia (Bustillo, Lauriello, Horan, & Keith, 2001). Perhaps, most important is the use of family-based programs in conjunction with maintenance medication. Several studies have evaluated treatment programs designed to help patients with families that are rated high in expressed emotion (Girón et al., 2010). In addition to antipsychotic medication, treatment typically includes two principal

components. First, the therapist provides family members with information about schizophrenia, on the assumption that some hostility and criticism result from failure to understand the nature of the patient's problems. Second, the therapist focuses on enhancing the family's ability to cope with stressful experiences by working on problem-solving and communication skills. Results with this type of family intervention have been very encouraging.

In Bill's case, his sister's family was not high in expressed emotion. Direct treatment focused on family patterns of communication was, therefore, unnecessary. The therapist did, however, spend time talking with Colleen and Roger about Bill's situation in an effort to help them cope with his idiosyncratic behavior. Bill's therapist also directed his attention to the development of social skills. These efforts met with mixed success. Social skills programs are often useful with schizophrenics who are being treated on an outpatient basis (Pilling et al., 2002).

There is also some reason to be cautious about the use of active psychological approaches to the treatment of patients who are socially withdrawn and exhibiting other negative symptoms (e.g., Kopelowicz, Liberman, Mintz, & Zarate, 1997). Programs that increase the level of social interaction among chronic schizophrenic patients may have adverse effects on other areas of the person's adjustment. Patients with severe, persistent, negative symptoms and those who are not on medication may not be able to cope with the increase in stress that is associated with an active, directive form of social intervention. This effect may have been evident in Bill's case. He was not receiving medication until after the therapist became aware of his extensive delusional system. His response to the behavioral program seemed to be more positive after the introduction of antipsychotic medication. Prior to that point, the role-playing that was attempted during sessions and the homework assignments during the week actually seemed to increase his level of anxiety.

Discussion Questions

1. One simple way to define a delusion would be to say that it is a false belief. But there is more to it than that. How would you describe Bill's delusional belief about the film that had presumably been made about him? What characteristics of his belief system were important, beyond the fact that it was not based on evidence that could be shared with other people?
2. What were the earliest symptoms that Bill was beginning to develop a psychotic disorder? Were there any meaningful signs of his disorder prior to the onset of hallucinations and delusions? If medication is effective for most people who have psychotic symptoms, should it also be prescribed for people who seem to be vulnerable to schizophrenia? What are the possible advantages and disadvantages of this approach to treatment? How could it be evaluated?