Clinician's Guide to
Evidence-Based Practice

Psychosocial Treatment of Schizophrenia

Edited by
ALLEN RUBIN, DAVID W. SPRINGER & KATHI TRAWVER

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Clinician's Guide to Evidence-Based Practice Series

Treatment of Traumatized Adults and Children
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This book is dedicated to the memory of my sister, Corrine Harris, and her husband, Morley Harris, who never stopped visiting my father after he was institutionalized for the rest of his life after getting a lobotomy for paranoid schizophrenia when I was a toddler. If only the medications and empirically supported psychosocial interventions described in this volume had been available to him back then!

Allen Rubin

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Series Introduction

One of the most daunting challenges to the evidence-based practice (EBP) movement is the fact that busy clinicians who learn of evidence-based interventions are often unable to implement them because they lack expertise in the intervention and lack the time and resources to obtain the needed expertise. Even if they want to read about the intervention as a way of gaining that expertise, they are likely to encounter materials that are either much too lengthy in light of their time constraints or much too focused on the research support for the intervention, with inadequate guidance to enable them to implement it with at least a minimally acceptable level of proficiency.

This is the third in a series of edited volumes that attempt to alleviate that problem and thus make learning how to provide evidence-based interventions more feasible for such clinicians. Each volume will be a how-to guide for practitioners—not a research focused review. Each will contain in-depth chapters detailing how to provide clinical interventions whose effectiveness is supported by the best scientific evidence.

The chapters will differ from chapters in other reference volumes on empirically supported interventions in both length and focus. Rather than covering in depth the research support for each intervention and providing brief overviews of the practice aspects of the interventions, our chapters will be lengthier and will have more detailed practitioner-focused how-to guides for implementing the interventions. Instead of emphasizing the research support in the chapters, that support will be summarized in Appendix A. Each chapter will focus on helping practitioners learn how to begin providing the evidence-based interventions they are being urged by managed care companies (and others) to provide, but with which they may be inexperienced. Each chapter will be extensive and detailed enough to enable clinicians to begin providing the evidence-based intervention without being so lengthy and detailed that reading it would be too time-consuming and overwhelming. The chapters will also identify resources for gaining more advanced expertise in the interventions.

We believe that this series will be unique in its focus on the needs of practitioners and in making empirically supported interventions more feasible for them to learn about and provide. We hope that you will agree and that you will find this volume and this series to be of value in guiding your practice and in maximizing your effectiveness as an evidence-based practitioner.

Allen Rubin, Ph.D.
David W. Springer, Ph.D.

Preface

Schizophrenia is perhaps the most disabling of all mental disorders. It produces significant residual cognitive, functional, and social deficits. As such, its treatment is complex and multifaceted, requiring a multidisciplinary approach. Although psychotropic medications comprise a vital part of the treatment, they are not sufficient. A large proportion of persons with schizophrenia discontinue their medication against medical advice, whereas others continue to have symptoms despite medication management. Common reasons for medication noncompliance are the undesirable side effects often produced by the medications and the stigma associated with admitting to being mentally ill by virtue of adhering to the medication protocol. Thus, in addition to prescribing medications, the treatment plan must include components that motivate patients to adhere to the medication protocol and that monitor adherence and possible side effects.

Furthermore, although medication adherence is necessary if treatment goals are to be achieved, it alone is insufficient for ensuring that problems related to social functioning, employment, and families will be adequately addressed. Treating schizophrenia does not just mean addressing hallucinations and delusions. It also means providing psychosocial interventions that address the social skills of the individual with schizophrenia, support their families, and give caregivers the skills they will need to cope with and support their sick loved one. In addition, it means providing a comprehensive array of community services that address housing and other needed resources, including the provision of case management efforts that aim to link the person with schizophrenia with needed services and resources.

Despite the severity and challenging multifaceted and disabling nature of schizophrenia, grounds for optimism for its treatment grow as newer and better medications are discovered and as rigorous research emerges supporting the effectiveness of various psychosocial interventions. These interventions help individuals with this disorder take their medications and adapt better to the community and help their families cope with and support them. Nevertheless, too few individuals with schizophrenia are receiving the treatment they need, and fewer still receive treatment

with sound evidence supporting its effectiveness. Drake, Bond, and Essock (2009) have reported that as many as 95% of people with schizophrenia receive either no treatment or treatment that is not evidence-based.

This volume aims to ameliorate that problem by offering detailed how-to chapters to guide practitioners in providing both well-established and emerging empirically supported interventions that show promise for improving the lives of adults with schizophrenia—people who need to have the most effective interventions offered to them in hopes of alleviating their suffering, enhancing their functioning, and supporting their recovery. After an introductory chapter that overviews schizophrenia and its symptoms and clinical implications, each subsequent chapter focuses on a specific psychosocial intervention approach. Each chapter is written in a practitioner-friendly manner, sprinkled with case examples throughout, to help readers learn how to provide interventions that are receiving the best empirical support without having to struggle with daunting research and statistical terminology.

Each of those chapters has been written by practitioners who have had extensive experience in providing the referent intervention and who are experts in it. As already mentioned, a distinctive feature of the chapters is their length. Unlike other compendiums with shorter chapters on various interventions for schizophrenia—chapters that emphasize the research supporting the interventions and offer briefer and sketchier guidance as to how to provide them—the chapters in this volume provide extensive, detailed, step-by-step guidance to practitioners in how to implement each intervention approach. Thus, the chapters are a middle ground between the sketchier chapters in other compendiums and entire books devoted exclusively to one specific intervention approach. By taking this tack, we hope to enable practitioners who work with people affected by schizophrenia but who lack the time to read separate books on each intervention approach to make their practice more evidence-based and thus more effective.

Organization

As mentioned previously, the first chapter provides an overview of schizophrenia, including its etiology, diagnostic aspects, medications, and the importance of medication compliance. As suggested in that chapter, treatment of schizophrenia should be multifaceted, and those various facets are addressed in subsequent chapters. For example, in Chapter 2, Piper Meyer, Susan Gingerich, and Kim Mueser provide a step-by-step guide for implementing the illness management and recovery program that includes a wide range of components, such as psychoeducation, behavioral tailoring for medication, relapse prevention training, coping and social skills training, and building social support.

In Chapter 3, Ellen Lukens and Helle Thorning describe how to implement an empirically supported family intervention. They note that the presence or emergence

of schizophrenia in a child, sibling, or parent can throw families into overpowering disarray. Family members commonly feel culpable for the illness, and that feeling too often gets reinforced by medical providers who find fault and pathology within the family. The psychoeducational multiple family group (PEMFG) intervention that Lukens and Thorning describe helps family members move from feeling blamed for their relative's illness to a point where they can be involved as collaborators in caring for and supporting their loved one.

In Chapter 4, Dennis Combs turns our attention to an empirically supported treatment approach that targets underlying deficits in information processing that contribute to various symptoms of schizophrenia, especially delusions and hallucinations, and their attendant emotional distress. He offers an extensive, detailed guide for providing cognitive-behavioral therapy (CBT) for schizophrenia.

Many adults with schizophrenia, however, have disorders that are so severe and disabling that they need a comprehensive community-based service delivery system to help them utilize treatment, avoid homelessness, function in the community, forestall decompensation, and prevent hospitalization or incarceration.

In Chapter 5, Kathi Trawver describes such an approach: assertive community treatment (ACT), an empirically supported model that provides case management (an intervention that itself is empirically supported), but goes beyond it to provide an around-the-clock basis for the gamut of services needed by individuals who experience the most chronic and disabling effects of schizophrenia.

In Chapter 6, Daniel Herman, Sarah Conover, and Jeffrey Draine describe another community-based approach, critical time intervention (CTI), which is an emerging empirically supported case management model designed to prevent homelessness among people with schizophrenia (or other severe disorders) during the transitional period after they are discharged from hospitals, prisons, shelters, and other institutions. As the authors explain, CTI shares some of the features of ACT but differs from it in that it is time limited to the period of transition from institution to community, does not provide direct ongoing assistance, and is more narrowly targeted to prevent homelessness.

Finally, in Chapter 7, Stanley McCracken and Jonathon Larson offer detailed guidance in the use of motivational interviewing (MI) to foster medication adherence. Although the empirical support for the effectiveness of using MI for this purpose is still emerging, their chapter is important in light of the vital role of medication adherence in virtually all treatment plans for schizophrenia and the widespread problem of nonadherence (as mentioned earlier).

This volume also contains three appendices. Appendix A reviews the research that provides the empirical support for the interventions covered in its seven chapters. Appendix B describes in detail the evidence-based practice process for readers who would like to learn more about finding and appraising research to guide their practice decisions. Appendix C provides a table displaying the antipsychotic medications prescribed for treating schizophrenia and their side effects.

Importance of the Therapeutic Alliance

One commonality among all interventions in this book is that a strong therapeutic alliance is required for them to be effective. A therapeutic alliance is the emotional bond developed between clinicians and their clients and is characterized by being open, collaborative, and trusting, as well as by sharing a consensus on treatment goals (Wittori et al., 2009). The essential importance of a therapeutic alliance in working with individuals with schizophrenia must not be underestimated. Among individuals with schizophrenia, a better therapeutic alliance is linked with higher levels of general and social functioning (Svensson & Hansson, 1999), reduced symptoms (Gehrs & Goering, 1994), fewer required medications, and improved medication adherence (Dolder, Lacro, Leckband, & Jeste, 2003).

Indeed, there is an ongoing debate as to whether the outcomes of psychosocial interventions in general (not just for schizophrenia) are influenced more by what specific intervention is provided or by the quality of the therapeutic relationship itself. Some meta-analytic studies have concluded that if the therapeutic alliance is quite strong, it does not matter what specific intervention is provided (Luborsky, Singer, & Luborsky, 1975; Wampold, 2001). Others have granted the necessity of a good therapeutic alliance while concluding that the specific intervention provided matters a great deal (Beutler, 2002; Craighead, Sheets, & Bjornsson, 2005; Lilienfeld, 2007). It is noteworthy that despite their disagreements about how much of the variance in outcome is attributable to nonspecific relationship factors versus specific intervention factors, both camps acknowledge that each set of factors has some meaningful degree of impact on whether treatment will be successful.

Consequently, regardless of your view of this debate, and even if you think relationship factors far outweigh specific intervention factors in influencing treatment outcome, your work with people affected by schizophrenia will be enhanced by learning about the empirically supported psychosocial interventions described in this volume. Moreover, as you read each chapter, you will see that each author acknowledges that a good therapeutic alliance is a key component of the intervention being described.

Indeed, a common misunderstanding of the evidence-based practice (EBP) process in general, not just in treating schizophrenia, is the notion that it downplays or neglects the importance of therapeutic relationship factors. In that connection, there is an important distinction between the EBP process and specific evidence-based (empirically supported) interventions. As will be seen in Appendix B of this volume, which describes the EBP process in detail, relationship factors are a key element of the EBP process, and that process acknowledges that a strong therapeutic alliance is necessary for any specific empirically supported intervention to be implemented effectively.

We hope that you will find this book helpful. We would appreciate any feedback that you can provide regarding how it has been helpful or how it could be improved. You can e-mail such feedback to arubin@mail.utexas.edu.

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About the Editors

Allen Rubin, Ph.D., is the Bert Kruger Smith Centennial Professor in the School of Social Work at The University of Texas at Austin, where he has been a faculty member since 1979. While there, he has worked as a therapist in a child guidance center and developed and taught a course on the assessment and treatment of traumatized populations. Earlier in his career he worked in a community mental health program providing services to adolescents and their families. He is internationally known for his many publications pertaining to research and evidence-based practice. In 1997, he was a co-recipient of the Society for Social Work and Research Award for Outstanding Examples of Published Research for a study on the treatment of male batterers and their spouses. His most recent studies have been on the effectiveness of eye movement desensitization and reprocessing (EMDR) and on practitioners' views of evidence-based practice. His 14 books include *Practitioner's Guide to Using Research for Evidence-Based Practice* and the first two volumes of this series—*Treatment of Traumatized Adults and Children* and *Substance Abuse Treatment for Youth and Adults*. He has served as a consulting editor for seven professional journals. He was a founding member of the Society for Social Work and Research and served as its president from 1998 to 2000. In 1993, he received the University of Pittsburgh, School of Social Work's Distinguished Alumnus Award. In 2007, he received the Council on Social Work Education's Significant Lifetime Achievement in Social Work Education Award. In 2010, he was inducted as a Fellow of the American Academy of Social Work and Social Welfare.

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Life. She is one of the developers of Illness Management and Recovery, a program for helping individuals with serious mental illnesses identify personally meaningful goals and learn strategies and skills that will help them achieve those goals.

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CHAPTER 1

Overview and Clinical Implications of Schizophrenia

Allen Rubin and Kathi Trawver

Schizophrenia is a chronic and seriously disabling brain disorder that produces significant residual cognitive, functional, and social deficits. Considered the most disabling of all mental disorders (Mueser & McGurk, 2004), schizophrenia occurs in about 1% of the world population, or more than 20 million people worldwide (Silverstein, Spaulding, & Menditto, 2006). In the United States, schizophrenia occurs in a little over 1% of American adults (National Institute of Mental Health [NIMH], 2009a). Typically, onset of adult schizophrenia begins in men in their early to mid-20's and later 20's in women (American Psychiatry Association [APA], 2000), rarely developing before age 16 (Lindenmayer & Khan, 2006), or after age 45 (Almeida, Howard, Levy, & David, 1995). Schizophrenia affects men and women in equal numbers (Mueser & McGurk, 2004).

A Brief Historical Perspective

From pre-Biblical times forward, mental illness has been explained in a variety of ways. What was common across the centuries was the belief that mental illnesses were a result of external forces such as God's will, demonic possession, witchcraft, dog bites, or poisons. It was not until the 17th century that a medically based etiology of mental illness was introduced (Stone, 2006). The modern conceptualization of schizophrenia today is based on the work of Swiss psychiatrist Eugene Bleuler (1857–1939) and German psychiatrist Émil Kraepelin (1856–1926) (Mueser & McGurk, 2004). Bleuler first introduced the term schizophrenia and identified the primary symptoms of the disorder, including ambivalence, autism, disturbance of affect, and disordered association, as well as secondary symptoms of delusions and hallucinations (Castle & Buckley, 2008). Kraepelin was the first to conceptualize what had been

previously believed to be a group of disorders under a single early onset, long-term debilitating brain disorder (Lavretsky, 2008).

Many of the past approaches used to ''treat'' schizophrenia are now considered horrifying atrocities. From early America's practice of burning the mentally ill at the stake for being possessed to more recent approaches initiated in the 1930s—such as barbiturate sleep therapy, insulin-induced comas, and psychosurgeries—we have desperately tried ''treatments'' that have inflicted substantial harm to individuals without any evaluation or scientific support for their use (Lavretsky, 2008). One of the most famous of these ''interventions'' was the frontal lobotomy or leucotomy that involved a severing of the nerves located in the frontal lobe. Between the 1930s and the 1950s, an estimated 50,000 Americans received lobotomies (National Public Radio, 2005). While these procedures reduced a person's agitation, a lobotomy also resulted in significant and disabling cognitive impairments. In the 1940s, electroconvulsant therapy (ECT) (applying electric current to the brain) gained in popularity and was frequently used in American hospitals to treat mental illnesses. Today, ECT is still used, but only for treating chronic schizophrenia in people with the most severe and persistent drug-resistant psychosis, catatonia, and unmanageable aggression (McClintock, Ranginwala, & Husain, 2008). It was just in 1952 that the first antipsychotic medication—Thorazine—was introduced. Since then, antipsychotic medications revolutionized treatment for people with schizophrenia, enhancing their ability to live outside institutions. During the 1960s, deinstitutionalization began moving thousands of people out of state hospitals and into the community. Unfortunately, the promise of adequately funded and readily available community mental health services has never been realized, resulting in large numbers of people with mental illness who are homeless or reinstitutionalized in jails and prisons.

Etiology of Schizophrenia

Today, the role of genetics, neurobiological pathophysiology (brain malfunctions or abnormalities), environmental triggers, and neurocognitive factors are all continuing to be researched as possible contributors or causal factors in the development of schizophrenia (Beck, Rector, Stolar, & Grant, 2009). While the cause of schizophrenia is still unknown, current science primarily points to a polygenetic neurodevelopmental predisposition compounded by environmentally -based biological and social risk factors (Arnold, Talbot, & Hahn, 2005).

Evidence of schizophrenia being an inherited disorder originated in adoption studies conducted in the 1960s. Of all the genetic risk factors known today, family history is still the strongest predictor of developing schizophrenia. For example, having a first-degree family member with schizophrenia increases a person's risk for developing the disorder by 10 times (Mueser & McGurk, 2004). Having two parents who are affected by schizophrenia increases an individual's

risk of developing the disorder themselves to nearly 50% (McGuffin, Owen, & Farmer, 1995).

Over the last few decades, researchers have identified several genes, single nucleotide polymorphisms (SNPs or ''snips,'' which are variations in DNA sequences), and chromosomal regions theorized to play a potential role in the development of schizophrenia. However, researchers have not yet conclusively identified the responsible genes or their specific mechanisms of transmission (Beck et al., 2009), leaving the precise contribution of genetics in developing schizophrenia still unclear (Tandon, Keshavan, & Nasrallah, 2008).

A number of biological and psychosocial environmental risk factors are believed to either independently or interactively impact a genetic risk factor in developing schizophrenia (Castle & Morgan, 2008). Pre- or peri-natal risk factors include winter birth, urban birth, intrauterine infections, *in utero* exposure to maternal stress, paternal age, and obstetric complications. Additional risk factors include childhood trauma, minority ethnicity, immigrant status, urban residency, substance abuse, poverty, and social isolation (Downar & Kapur, 2008).

While the aforementioned risk factors have been linked to a significantly greater likelihood of developing schizophrenia, their importance and exactly how they contribute to the development of the disorder still remain unclear (Tandon et al., 2008). The heterogeneity of potential causes, the complex patterns of how gene-to-gene and gene-to-environment factors may interact, and the still inadequately explained etiology of functional deficits caused by schizophrenia are all offered as an explanation as to why we still do not completely understand the causes, development, and effects of the disorder today (Tandon et al., 2008). Additionally, the effects of age, comorbid health and psychiatric disorders, and environmental stressors further obscure scientists' ability in pinpointing the exact etiology of schizophrenia (Arnold, Talbot, & Hahn, 2005).

Symptoms of Schizophrenia

Schizophrenia is characterized by clusters of positive symptoms (e.g., hallucinations, delusions, and/or catatonia), negative symptoms (e.g., apathy, flat affect, social withdrawal, loss of feeling, lack of motivation, and/or poverty of speech), and disorganized symptoms (e.g., formal thought disorder and/or bizarre behaviors). In addition, individuals with schizophrenia often experience substantial cognitive deficits including loss of executive function, as well as social dysfunction.

Clinicians wanting to assess the impact and severity of their clients' psychotic symptoms may want to use the Positive and Negative Syndrome Scale (PANSS). The PANSS is a 30-item scale that includes 7 positive and 7 negative symptom items, and 16 general psychopathology items, all scored on a 7-point severity scale (Kay, Opler, & Lindenmayer, 1989). The symptoms that are assessed in the PANSS are detailed in Figure 1.1.

Figure 1.1 Symptoms Considered in the Positive and Negative Syndrome Scale (PANSS) for Schizophrenia.

Positive Symptoms
1. Delusions
2. Conceptual disorganization
3. Hallucinatory behavior
4. Excitement
5. Grandiosity
6. Suspiciousness/persecution
7. Hostility

Negative Symptoms
1. Blunted affect
2. Emotional withdrawal
3. Poor rapport
4. Passive/apathetic social withdrawal
5. Difficulty in abstract thinking
6. Lack of spontaneity and flow of conversation
7. Stereotyped thinking

General Psychopathology Symptoms
1. Somatic concern
2. Anxiety
3. Guilt feelings
4. Tension
5. Mannerism and posturing
6. Depression
7. Motor retardation
8. Uncooperativeness
9. Unusual thought content
10. Disorientation
11. Poor attention
12. Lack of judgment and insight
13. Disturbance and volition
14. Poor impulse control
15. Preoccupation
16. Active social avoidance

Positive Symptoms

Positive symptoms can include several different types of hallucinations and delusions, and also catatonia. Generally, exacerbation of one's positive symptoms tends to be episodic over time, often resulting in acute relapse and increased risk of harm to oneself or others. Frequently, psychiatric hospitalization is necessary to stabilize a person (Mueser & McGurk, 2004).

Hallucinations

Hallucinations are defined as ''a sensory perception that has the compelling sense of reality of a true perception but that occurs without external stimulation of the relevant sensory organ'' (APA, 1994, p. 767). Hallucinations can occur in any of a person's senses, resulting in visual, auditory, olfactory, tactile, gustatory, or a mix of experiences.