Early Psychosis

A CARE GUIDE

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QUALIFYING STATEMENT

This guide provides an overview of practices that the authors believe to be optimal in treating and assessing early psychosis. Information and advice provided in the guide are based on:

- a thorough review of published research evidence, including comprehensive published reviews (emphasis was placed on controlled studies, with uncontrolled trials and quasi-experimental designs used only where they provided information unavailable through controlled trials); priority was given to literature specific to early psychosis
- examination of existing clinical practice guidelines
- direct consultation with experts concerning current clinical practices.

Readers will also find that the guide is not a standard of care and does not stipulate a single correct approach for all clinical situations. Decisions regarding specific procedures for specific individuals with psychosis remain the responsibility of the attending professionals.

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Section I

INTRODUCTION

Goals

This guide summarizes current knowledge of early psychosis intervention. The main goals of the document are to

- increase understanding of the rationale behind early intervention and the guiding principles of care and support for persons in the early phase of psychotic disorders
- guide clinicians in specific aspects of management
- reduce unwanted variations in clinical practice by encouraging the use of appropriate procedures and services
- act as a planning vehicle to improve service delivery systems and guide policy makers in implementing changes to mental health systems and policies.

Principles and assumptions

- An evidence-based approach was employed in writing the guide. Empirically based findings directly derived from early psychosis populations were given priority. When such evidence was not available, studies from the general literature on schizophrenia and other psychoses were utilized. Finally, expert opinion formed the third source upon which discussions are based.
- The development of psychosis is best accounted for by a stress-vulnerability model. This model asserts that predisposing factors such as genetic makeup can render an individual susceptible to developing a psychotic disorder. The disorder becomes manifest given sufficient triggering factors. This process can pertain to both initial onset and subsequent episodes of psychosis.
- There are phases to a psychotic disorder: vulnerability (high-risk), prodromal, acute, recovery, remission and relapse. Each phase carries implications for assessment, treatment and support.
- Psychotic disorders produce pervasive changes in individuals and social networks. Care needs to encompass the entire spectrum of areas important to an individual's well-being rather than focus solely on the signs and symptoms of psychosis. Optimal care consists of integrated biopsychosocial approaches tailored to the unique characteristics of each individual. Psychosocial treatments have both direct effects and effects that arise from their interaction with pharmacological interventions in the treatment of psychosis and associated secondary problems.
- Validated interventions undertaken by trained caregivers produce better outcomes. This guide can help educate professionals as to current best practices. Practitioners should strive to stay within their competencies, advocate for and receive training where needed, and seek others' expertise through referral and consultation.
- Intervention applied in the least-restrictive setting possible is advocated. The least-restrictive setting is one that affords the individual the greatest possible number of personal rights and choices, yet still provides necessary services and safety.

Scope

- This guide is not intended to apply to psychotic conditions that have become chronic. However, many individuals who have experienced several psychotic episodes could benefit from the interventions discussed in this guide. The term early psychosis is loosely defined as approximately five years after onset of psychotic symptoms.
- The assessment and treatment discussions are applicable to individuals presenting with various psychotic disorders. However, most knowledge is derived from studies of schizophrenia. Whenever possible, evidence directly pertaining to other psychotic disorders has been incorporated.
- A focus is kept upon adolescent and young adult populations.
- Emphasis is placed upon service delivery. This guide does not extensively review research related to etiology, pathophysiology, or epidemiology.
- The guide covers fundamental clinical care issues. It is not a critique of all possible approaches nor is it a "how-to cookbook" outlining specific techniques in detail. It is not exhaustive and does not rule out numerous approaches that may be merited in particular cases.

Rationale for early intervention

The most common diagnoses associated with psychosis are schizophrenia, schizophreniform disorder, schizoaffective disorder, bipolar disorder, and major depression with psychotic features. In recent years, interest has grown in treating psychotic disorders as early as possible (1). Intervention in early psychosis aims to reduce the duration of untreated psychosis, thereby reducing immediate suffering and improving long-term outcomes (2).

GOALS OF EARLY INTERVENTION

- better short and long term prognoses
- increased speed of recovery
- lower use of hospitalization
- decreased risk of damaging socio-economic consequences to the individual
- reduced secondary psychiatric problems (e.g. depression, substance abuse, etc)
- minimization of family disruption
- preservation of personal assets, psychosocial skills, role functions and social/environmental supports
- reduced relapse risk

For all psychotic disorders, the better the short-term course, the better the long-term outcome (3). Many studies found long delays before treatment began in first-episode psychosis. Long durations of untreated psychosis have been associated with slower and less complete recovery, more biological abnormalities, more relapses and poorer long-term outcomes (4).

The early phase of psychosis, the period when most deterioration occurs, may represent a "critical period" for determining long-term outcome (5). This period may present an important treatment opportunity because course-influencing biopsychosocial variables, including patient and family reactions, develop and show maximum ability to positively change during this time (6). The relationship of the duration of untreated psychosis to outcomes is complex. Research findings are not unanimous in showing that longer duration signals poorer outcome (7). Although the relationship between duration of untreated psychosis and outcomes awaits further clarification, truncating the time to effective treatment is one of several ways that improvement in long-term outcomes may be produced.

Onset of psychosis typically occurs in late adolescence or early adulthood, thereby causing a major disruption in the ability of individuals with the disorder to meet developmental challenges such as

- pursuing academic or vocational goals
- developing sexual and social relationships
- managing independent living
- establishing personal values and identity.

Rationale for early intervention / continued

At the same time, persons in the throes of a psychosis usually experience tremendous distress and may engage in actions that are dangerous to themselves and others. Family relationships may be affected, and individuals experiencing psychosis may also be prone to suicide, depression, aggression, substance abuse, cognitive impairment and anxiety disorders.

Effective early intervention seeks to address these problems by

- pursuing academic or vocational goals
- developing sexual and social relationships
- managing independent living
- establishing personal values and identity.
- providing age-appropriate support to minimize disruption in the lives of these individuals and enable them to more successfully meet their developmental challenges
- limiting the suffering and possible negative repercussions of psychotic behaviour
- assisting families
- remaining sensitive to factors that may hinder successful ongoing treatment, such as
  - > negative effects generated by aversive assessment and/or admission procedures
  - > medication side effects
  - > stigma and other impediments to collaborative relationships.
- providing treatment for associated problems such as suicidal tendencies, depression, aggression, substance abuse, cognitive impairment, and anxiety disorders, rather than simply assuming that these features are secondary phenomena.

COURSE AND OUTCOMES IN PSYCHOTIC DISORDERS

Most psychotic disorders tend to follow a relapsing course wherein periods of acute psychosis are preceded by periods of disruption (a 'prodrome') and followed by recovery, deterioration, and subsequent re-emergence of florid psychosis. By conceptualizing the disorder as consisting of these phases, different strategies become appropriate for assessment and treatment at each stage (10).

For schizophrenia, males generally have an onset of psychosis during adolescence or early twenties. Females tend to have an onset when they are several years older. About 39% of males and 23% of females have onset of schizophrenia before age 19 (11). Onset of bipolar disorder is slightly later with about 25% occurring before age 20 (12).

Numerous studies of first-episode patients with schizophrenia have reported on long-term outcomes. Typically, about 20-30% of first-episode patients recover with no persisting symptoms (13). Poor symptomatic outcomes are found in 20-42% of cases. Moderate to severe functional and/or social impairment is found in about half of patients after five years (14). One five-year prospective study found that 30% of patients were considered to have a good outcome with 14% doing poorly and 56% having an intermediate outcome (15). About 27% had competitive employment and good social networks.

Rationale for early intervention / continued

COURSE AND OUTCOMES IN PSYCHOTIC DISORDERS, continued

Almost 40% of patients showed no or minimal symptoms. About half of the 20% not on medication at five years had good outcomes. However, other studies have reported worse outcomes with about 50% doing poorly and less than 20% being in remission after five years (16). In contrast to these overall general response rates, data from studies with high medication adherence rates presents a more favorable picture of recovery. For example, one study employing injectible medication reported that about 85% of first episode patients were considered recovered by one year (17).

When all psychotic disorders are considered, about half of the patients were considered to have a good outcome after 15 years (schizophrenia 38% versus other psychoses 55%) (3). However, if more stringent criteria are used that exclude patients who had an episode of treatment in the previous two years, and includes those who showed no symptoms, and enjoyed a reasonably high level of functioning, the proportion of recovered patients falls to 16% for those with schizophrenia and 36% for those with other psychoses (3).

Persons with schizophrenia who are male, with cognitive impairment, less education, and lower premorbid functioning levels tend to have poorer outcomes (18). Additional predictors of poorer long-term outcomes include onsets associated with younger age, history of drug abuse, lack of close friends and negative symptoms (3). Schizophrenia is associated with poorer functional outcomes and slower recoveries from episodes than other psychotic disorders (19) (3). For all psychotic disorders, the better the short-term course, the better the long-term outcome with the percentage of time spent with psychotic symptoms in the first few years being the best predictor (3).

Bipolar disorder is a prototypical relapsing-remitting psychiatric disorder. Patients who have ever been hospitalized are expected to spend about 20% of their lifetime in episodes (starting from the onset of their disorder) (20). One half of bipolar episodes last between two and seven months (median three months), with inter-episode intervals shortening over time. A 15-year follow up of bipolar patients found that 17% showed a poor overall long-term outcome. Full compliance with medication, younger age at onset and male sex predicted good outcome. Younger age at onset as well as male sex, but not full compliance, also predicted a favorable psychosocial outcome (21). About 90% of youths with mania will continue to have adult recurrences (22). Within one year of a first hospitalization for an affective psychosis, 56% achieved syndromal recovery but only 35% achieved symptomatic or functional recovery (23).

PRIMARY TARGETS FOR TREATMENT

Historically, the primary target symptoms were positive symptoms of psychosis (e.g., delusions, hallucinations, thought disorder, and disorganization) and/or manic symptoms. Later, the importance of treating negative symptoms became apparent. These defining features of psychosis remain the primary targets of initial treatment efforts.

Psychosocial rehabilitation of social skills, activities of daily living, and vocational pursuits have a long history in the treatment of psychosis. However, early psychosis treatment tends to emphasize the preservation of personal skills, opportunities, environmental supports, and social relationships.

More recently, it has been recognized that other psychiatric symptoms and cognitive deficits are intricately associated with psychotic disorders but do not necessarily vary with the positive psychotic symptoms (24).

Rationale for early intervention / continued

PRIMARY TARGETS FOR TREATMENT, continued

Associated psychiatric features of psychosis include suicide, depression, aggression, substance abuse, and anxiety disorders such as post-traumatic stress disorder (25) (26) (27) (28). About 45% of drug-free patients with schizophrenia were found to have significant depressive symptoms (29). Psychosis, regardless of type, carries an increased risk of suicide – half of the persons with schizophrenia who commit suicide do so in the first five years of illness (30). The rate of completed suicide in patients with schizophrenia is usually estimated to be about 10%, a rate 25 times greater than in the general population (31).

Cognitive deficits may both mediate functional performance and form the substrate of many psychotic experiences. Patients with a first episode of schizophrenia frequently show a large generalized neuropsychological deficit along with more selective deficits in attention, learning, memory, speeded visual-motor, and executive functions (32) (33) (34). Similar cognitive impairments are also present in other psychotic disorders (35) (36). Poorer long-term social functioning has been related to impaired cognitive functioning and more severe negative symptoms (37) (38) (39). Cognition is increasingly being targeted through both pharmacological (40) (41) and psychosocial approaches (42) (43) (44).

Section II

THE EARLY INTERVENTION SERVICE-DELIVERY SYSTEM

Initializing Early Intervention Services

An early intervention approach implies the following basic actions:

1/ identification and referral early in the course of the illness

2/ rapid and appropriate response to the referral

3/ significant efforts to develop a long-lasting therapeutic alliance

4/ prompt initiation of suitable treatments

5/ minimization of negative effects associated with assessment and treatment

6/ provision of relapse prevention service

7/ completion of outcome assessments to assure quality service delivery and refine future services.

continued . . .

Initializing early intervention services / continued

To accomplish these goals two major initiatives must be pursued. The first entails early identification of cases and linking persons with services. The second entails development of service-delivery systems that can provide appropriate interventions.

Education programs aimed at people who are positioned to recognize and refer an individual who is becoming psychotic enhance early identification. Teachers, the general public, students, family physicians, professionals and paraprofessionals working in health, forensic, educational, and business settings are populations that may be targeted for education. Educational content should include information on

- signs and symptoms that may indicate psychosis
- the potential benefits of early intervention
- the availability of appropriate services and how they can be accessed.

The Australian National Early Psychosis Program developed a set of early intervention guidelines in 1998 that formed a basis for action for both administrators and clinicians (45). The following steps to facilitate early intervention are derived from the Australian guidelines.

INCREASE PUBLIC AWARENESS

The first step toward enhancing early intervention is to increase public awareness about psychosis. The recognition of psychotic symptoms and awareness of the need for treatment are low in the general public (46). Education helps to dispel myths and misconceptions that result in stigma and counter the false belief that little can be done to effectively treat psychoses. Public education aimed at custodians and at-risk populations should communicate in simple and respectful terms the signs and symptoms, the risk factors, the availability of effective treatments, and the rationale for early identification and treatment.

INCREASE AWARENESS OF AVAILABLE SERVICES

Even if a problem is recognized, patients and families may not be familiar with existing services. Public awareness of available services and ease of accessing information about these services facilitate first contact. Health professionals and other service providers should inform patients and families of the range of services available. Special efforts must be made to educate teachers, physicians, counsellors, and other service providers about early intervention services and how to access them. Increasingly, the Internet is employed as a first step in persons' search for information. The development of websites can serve to provide education and specific information on local services.

INCREASE ACCESSIBILITY OF SERVICES

Patients should find access to services simple and convenient rather than stressful, confusing, and complicated. Psychotic symptoms and cognitive deficits can significantly impair an individual's ability to access services. Entry can be facilitated by accepting referrals from a wide variety of sources and situating services in discrete, accessible settings.

Initializing early intervention services / continued

INCREASE RESPONSIVENESS OF SERVICES

After a referral is made, individuals should not have to wait for extended periods before being seen. If the interval is long, ambivalence the individual may have about entering treatment could result in a failure to follow through. Fewer than 40 percent of persons with severe mental disorders receive ongoing treatment (47). Young adults and those living in urban areas are especially likely to have unmet needs for treatment. The majority of those who did not receive treatment felt that they did not have an emotional problem requiring treatment. Among those who did recognize a need for treatment, 52 percent reported situational barriers, 46 percent reported financial barriers, and 45 percent reported perceived lack of effectiveness as reasons for not seeking treatment. The most commonly reported reason both for failing to seek treatment and for treatment dropout was a desire to solve the problem without treatment (47). If an individual believes there is a need for treatment yet is denied prompt access to services, there is a risk that the individual's distress will be exacerbated and that psychotic symptomatology will worsen. What was a situation that could be handled in the community may deteriorate into one needing hospitalization.

Services should be organized so that clinicians can respond quickly, efficiently, and humanely. Creative alternatives to traditional office visits may facilitate early treatment. For example, a first meeting could occur at a school and include someone such as a teacher or friend, if the patient wishes it. Assessors must tactfully respect the patient's privacy and be aware of social and cultural concerns.

Models of service delivery

Educational initiatives must occur in the context of suitable services. In an integrated approach, community services are not isolated from inpatient units. Whereas many early psychosis programs begin at inpatient units and gradually add outreach components, others start in the community and then integrate hospital services into their programs. An empirical comparison of these approaches to early intervention has not been conducted. Perhaps a more critical issue concerns the skills available to the team members and the support they receive from management and policy makers in being able to utilize those skills.

The development of multidisciplinary community teams is now the predominant model of care in many jurisdictions. Compared to standard care, team care has been shown to be cost effective, better liked by patients, and able to produce clinical outcomes similar to those associated with standard care (48).

Although early intervention hopes to avoid hospitalization through early identification and avoid re-hospitalization by decreasing relapse, the fact remains that 50% of first episode cases will be hospitalized within a week of first making contact with psychiatric services and 80% within three years (49).

Models of service delivery / continued

INPATIENT SERVICES

Ideally, specialized inpatient units catering to the unique needs of young persons with early psychosis should be available. Such facilities would have the capability of providing early-psychosis-specific interventions in the context of a homogenous patient population. Staff would have available early-psychosis-specific resources and be well trained in their utilization. Patients of a similar age and stage of illness could benefit from each other as they are undergoing a similar experience. They would also be shielded from the apprehension that can be produced by being grouped with more chronically ill patients. Sufficient numbers of patients would allow for the potential to hold age-appropriate and stage-appropriate group interventions. Also, recreational activities and general ward atmosphere could be tailored to reflect youth culture, thereby helping to normalize the experience and provide continuity with their normal pursuits.

Unfortunately, the development of such units would be restricted to large urban areas. The vast majority of early psychosis cases will present to general inpatient units. Ward managers should be sensitive to optimal early psychosis practices and strive to incorporate them into daily practice. One initial strategy would be to provide staff training in these issues and assign staff with the greatest interest and expertise to first-episode admissions.

Avoiding hospitalization when possible may decrease system costs and represent a less trying experience for the patient and family. Alternatives to hospitalization include home care, outpatient services, or specialized halfway houses. These settings must have adequate supportive capacities and are not usually suitable for individuals at risk for harm to self or others.

Inpatient-outpatient liaison

If outpatient services are ongoing before a first admission is needed, the outpatient mental health worker should be involved in the intake procedures, throughout the period of hospitalization, and in discharge planning. This may mean having the mental health worker accompany the person to hospital.

Conversely, if first contact is hospitalization, early engagement of community services should be established. This will help ensure smooth transition and reduce the likelihood of the patient becoming lost to "the system" after discharge from hospital. It is particularly important in early psychosis cases to initiate discharge planning as soon as possible after admission since the patient is unlikely to have any familiarity with community resources and housing options.

COMMUNITY SERVICES

Case management

Case management is at the center of comprehensive treatment of psychosis. It provides a continuing relationship between service providers), the patient, and his or her family. The goals of case management are to:

- engage and maintain contact with the patient
- ensure continuity of care
- provide comprehensive treatment
- increase accountability of service providers.

Models of service delivery / continued

COMMUNITY SERVICES
Case management, continued

At a minimum, a case manager should be:

- knowledgeable about theories of psychosis, presentation and course, and the range of treatments appropriate for early psychosis
- skillful at assessing psychosis, early warning signs, other potential comorbid conditions, level of functioning, and medication side effects
- proficient at providing suitable psychoeducation
- aware of other appropriate available services.

Additional training in a variety of psychosocial treatments allows the case manager to offer more comprehensive care without having to refer to another professional. Case managers should only provide treatments consistent with their level of expertise.

Forms of case management

Brokerage –

- The case managers' role is to refer the patient to services and coordinate care.
- The case manager does not usually provide direct care to the patient.

Clinical case management –

- Within this model, the approaches differ in emphasis (i.e., rehabilitation, personal strengths) and intensity (i.e., intensive case management, which includes frequent contact and proactive outreach).
- An individual case manager directly provides the majority of services/treatments. Referrals are made to other services on an as-needed basis.

Assertive community treatment –

- Intensive support and rehabilitation are provided where the patient resides.
- Support and treatment responsibilities for a case are shared by a team of mental health workers rather than by one individual case manager.

Clinical case management has been shown to increase contact with mental health services and treatment adherence (50). There is less evidence that it results in improvements in mental state or social functioning when compared to standard care. Within the general model of clinical case management, intensive case management is associated with better short-term outcomes and lower rates of hospital admission (51) (52).

Compared to clinical case management, there is more evidence demonstrating the effectiveness of assertive community treatment (53). In addition to increasing contact with services and improving treatment adherence, assertive community treatment is associated with a lower rate of hospital admission, improved accommodation and employment status, and higher levels of patient satisfaction (51) (54) (55). Patient-focused case management (in which the patient is seen as an equal partner in treatment) is also associated with greater patient satisfaction with services (56).

Models of service delivery / continued

Case management for early psychosis

The vast majority of studies examining clinical case management and assertive community treatment have focused on patients with significant social disability and chronic psychotic illnesses. Most early psychosis programs utilize a model of intensive clinical case management. In the only study to date, at three-month follow-up, there were greater improvements in treatment alliance and adherence with assertive community treatment than with standard clinical case management (57). Either assertive community treatment teams or intensive case management with team back-up appear to be the most desirable case management approaches to providing community care for individuals with early psychosis.

Case management tasks and phase of psychosis

Case management tasks have been subdivided according to phase of disorder (58):

Acute phase –

- Priorities in this phase are to establish engagement, provide symptomatic relief, perform a comprehensive assessment, and provide information about psychosis and treatments.
- Although there is considerable variability across individuals, the acute phase typically lasts several weeks.
- Patients and families are usually seen several times per week.

Early recovery phase –

- As the psychosis begins to respond to treatment, the case manager starts to address secondary problems (e.g., depression, anxiety, substance abuse), provides psychoeducation, encourages adherence, monitors for side effects, explores the patient's explanatory model, teaches coping strategies, and gradually begins the reintegration process.
- This phase frequently lasts several months.
- Visits occur about one to two times per week.

Later recovery phase –

- Later in recovery, the case manager continues to treat secondary problems, works on relapse prevention, assists with problem solving, and monitors for return of symptoms.
- Visits are about once per week, moving to once per month as recovery progresses.

The case manager should become actively involved with the patient and family as soon as possible – at the initial assessment or as soon as possible after hospital admission (58) (59). The case manager typically carries the bulk of responsibility in providing direct service to the patient and family. The case manager must be accessible to the patient and family should a crisis arise, flexible to meet the individual needs of patient and family, as well as optimistic and encouraging in the promotion of recovery.

The transition from adolescent to adult services may be particularly awkward. If such a transition is unavoidable or associated with possible benefits to the patient (i.e., access to other services not available in adolescent services), case managers are advised to gradually transfer therapeutic contact until engagement with the new case manager is established.

Group interventions

Case managers often act as leaders in therapeutic and educational groups. Groups can be a useful and cost-effective method for providing education, support and treatment to people with psychosis and their families. Group work may cover a wide variety of topics including psychoeducation, health education, life style issues, stress management, social skills training, occupational preparation, academic upgrading, and recreational pursuits. Specific benefits of the group approach include:

- a sense of belonging for those whose social circles have diminished
- an opportunity to develop interpersonal skills
- a rich source of ideas for problem-solving regarding specific situations (60) (61).

Group approaches need to include individuals who are at a similar stage in terms of phase of illness and need. Efforts should be made to create a climate that is safe for disclosure, allows discussion of individual views of the illness, and allows equal participation. Group membership should be kept as consistent as possible. Skilled facilitation must be available to minimize the possible deterioration into "gripe sessions" (62) (63). When case managers facilitate the sessions, clinical issues that arise can be handled in the context of continuity of care. Ideally, there should be two facilitators, and the group should run in parallel with individual psychoeducational interventions, including home-based interventions (62) (64).

Experience from early psychosis patient-group programs shows that they may be less desirable for individuals who are further along in their recovery, and less convenient for people who continue to attend school or work (65). Group-based education and interventions should be considered as an adjunct (not an alternative) to individually based work.

Section III

ASSESSMENT

Assessment

Assessment and treatment constitute the core of early intervention. Ongoing accurate assessment guides treatment decisions, monitors changes over time, reveals additional areas in need of attention, and allows for program evaluation and research. Assessment domains and procedures are examined here in sufficient detail to allow clinicians to meaningfully review their own practices.

Goals of assessment

Assessment provides sufficient information for diagnosis, guides treatment planning and facilitates the development of a therapeutic alliance. Assessment must be ongoing in order to ascertain change, uncover new problem areas and evaluation service delivery. The quality and breadth of any assessment session will be affected by time constraints, degree of rapport, the assessor's skill, and the patient's insight and ability to cooperate. A mental status exam should ascertain the presence, severity, and duration of signs and symptoms. A thorough assessment ensures collection of collateral information from family, social worker, school, police, or other authorities, etc. Many of the following assessment recommendations were derived from existing clinical practice guidelines (45, 66-69) (70).

Assessment – Content areas

SIGNS AND SYMPTOMS

Regardless of the stage of illness, assessments of symptoms and functioning are essential. The assessor not only focuses on the referral symptoms suggestive of psychosis, but conducts a comprehensive assessment of symptoms to allow for the diagnosis of comorbid conditions such as depression and substance abuse. Particular attention should be paid to any indicators of suicidal, homicidal, or victimization risk.

FUNCTIONING

The status of social relationships, school and/or work performance, recreational pursuits, finances and ability to manage money, self care, religious activities, domestic roles, housing and clothing needs to be ascertained. The rate of change in these functions should be established, wherever possible.

HISTORY

From interview and collateral information, the following histories should be taken: birth and development, medical, psychiatric, forensic, academic/occupational, recreational, and social. Any neurological problems such as head injury, loss of consciousness, or difficulties with walking, coordination, or speech should be noted. The family history should include queries regarding past and present psychiatric conditions, adjustment issues, interaction, and environment. Enquiries about past involvement with services, previous treatments, and the outcomes of those treatments will facilitate development of both a collaborative relationship and the treatment approach.

COGNITION

A preliminary estimate of cognitive and intellectual functions can be derived from the mental status exam. The assessment of intellectual and cognitive function has ramifications for occupational and educational possibilities, rehabilitation training, and the provision of services and financial support (71) (72). Neuropsychological assessment may detect unusual patterns of deficit that could have diagnostic implications. Also, cognitive assessment can help a patient understand personal limits and the fact that their illness is a brain disorder. Conversely, areas of relative strength can be identified.

Assessment – Content areas / continued

STRESS/COPING/PERSONALITY

Enquires should be made about significant life events, instrumental needs, social stressors, chronic and daily hassles, family conflicts, and developmental adjustment issues such as sexual difficulties, school/work problems, identity formation, and separation-individuation. Assessment of self-concept, personality and coping styles may assist diagnosis and treatment. In addition to taking histories and conducting interviews, the assessor can use one or more of the many standardized instruments available. The assessment of strengths and intact functions benefits intervention targeting, retention of self-efficacy, and the relationship between patient and service provider.

THE PATIENT'S EXPLANATORY MODEL

Understanding the patient's explanation of his or her condition should help promote a collaborative alliance. Emotional and behavioural responses to the psychosis can be explored along with the strategies employed to relieve distress. Patient and family attitudes to mental health services, medications, and alternative therapies may be related to the degree of convergence between their explanatory models and what they believe to be the conceptual models underlying various services.

PHYSICAL ASSESSMENT

The presence of physical disorders in patients with psychiatric disorders is high. Problems with eyesight, dentition, and high blood pressure become especially common as the illness progresses (73). A greater number of current medical problems appear to contribute to more severe psychosis, depression, and greater likelihood of suicide attempts (73). Every patient should receive basic neurological and general physical examinations. The presence of movement abnormalities prior to initiating antipsychotic drug treatment should be carefully noted. Basic laboratory tests should include:

- complete blood count
- electrolyte and glucose measurements
- tests for hepatic, renal and thyroid function
- tests to determine HIV and STD status.

These tests can help identify the presence of psychosis-inducing medical illnesses and provide baseline information that may have implications for the treatment plan. A toxicology screen should be ordered. Urine and blood analysis can also help detect systemic infections. Heart function (perhaps including electrocardiogram) should be ascertained since antipsychotic medications may have adverse cardiac effects. The patient should be weighed before beginning treatment.

IMAGING

The use of brain scans (i.e., CT scans) of individuals with recent onset psychosis is justified in order to rule out neurological diagnoses that may mimic schizophrenia in their early stages. A scan also serves to reassure patient, family, and physician that diagnostic possibilities with visible cerebral insult have been considered. Certain brain abnormalities frequently found in schizophrenia are not diagnostically specific and therefore, neuroimaging is not necessarily indicated if the neurological exam and history are normal (68).

Initial interview considerations

Good rapport produces better information and greater adherence to treatment. Initial contact should focus on engaging the patient, while obtaining critical clinical information on risk and symptoms. Both patient and interviewer must feel safe. Inform the patient about

- who made the referral and why
- what the assessment will consist of
- what the interviewer's role will be
- who else will have access to the assessment information
- the provisions for explaining the results of the assessment.

The limited experience of most young persons with government agencies or mental health professionals might increase their level of stress. Attempts to minimize distress or reluctance around a first visit may include conducting the initial assessment in an environment comfortable for the patient (e.g., the home), avoiding a long period in the waiting room, and encouraging someone the person trusts to attend the session. A fairly short interview, concern for the person's physical space, and encouragement of participation and input into the pace and content of the visit can all facilitate a successful initial visit.

Some patients may have a history of violence, be under the influence of drugs or alcohol, or present as physically intimidating. Interviewers can minimize the risk of being assaulted by conducting an interview in close proximity to other staff, maintaining non-threatening verbal and nonverbal communications and paying attention to escape routes. If the patient picks up on the interviewer's discomfort, anxiety, or fear he or she may not engage well with the process. For further information refer to section on Acute Inpatient Presentations.

Paranoia and distrust, substance abuse, preoccupation with psychotic experiences, difficulty identifying feelings or finding words to express their experiences, and lack of knowledge about the abnormality of certain experiences can all hamper assessment. The quality of information may be affected by the patient's intelligence, language, and cultural heritage. The family can usually help the assessor determine whether certain beliefs or behaviours are abnormal.

In addition to family members, friends, school personnel such as teachers and counselors, and others who know the patient well can all be a source of collateral information (for information on the confidentiality requirements associated with early psychosis, see the material in Section VI, Legal and Ethical Issues). The impact of the patient's deterioration on them should be explored and acknowledged. When a patient is hesitant to allow family involvement in the assessment, the clinician should be patient, continue to develop rapport, and explore the reasons behind the patient's hesitation.

Semi-structured interviews increase diagnostic reliability and may help elicit features overlooked in unstructured clinical interviews. Standardized clinical rating scales also help ensure consistent coverage, quantify symptom severity, and permit later comparisons (74).

Assessment feedback

Assessment feedback that is informative and hopeful is usually effective and helps to initiate therapy. Discussing the diagnostic possibilities with the patient and the family provides an opportunity to provide realistic hope and understanding about effective treatment. It is best not to be overly speculative about diagnoses when uncertain. The patient and others involved in the process need to understand that accurate diagnosis often requires observation of symptoms over a period of many months. In these instances it is better to retain a focus on effectively treating the presenting problems while acknowledging the uncertainty. It is important for the assessor to be sensitive to the rate and amount of information that others can absorb. Feedback that addresses personal strengths and resources should be provided in addition to information about identified problem areas.

Diagnosis

Diagnosis provides important information on possible treatments and outcomes. A diagnostic formulation should be completed, including all five DSM-IV axes and possible rule-out diagnoses. In early psychosis cases, a specific diagnosis may be ambiguous, even though the need for treatment is clearly present. Presenting symptoms prioritized by a provisional diagnosis (e.g., psychotic symptoms) should form the main focus of initial treatment.

Changes in the diagnosis are frequent in first-episode psychosis. The temporal criteria in DSM-IV necessitate some diagnostic changes (e.g., schizophreniform to schizophrenia). Other changes in diagnosis over the early course could result from a reluctance to label illness early, a shift in symptoms over time, and neglect of the importance of affective features. This diagnostic instability may be particularly evident in adolescents, almost 50% of whose initial diagnoses are subsequently changed (75). In adolescents, diagnoses of schizophrenia and affective disorder demonstrate better stability over time than diagnoses of schizoaffective disorder and atypical psychosis (76). For example, whereas 80% of patients diagnosed with schizophrenia in adolescence would retain that diagnosis as adults, the percentages for schizoaffective disorder and atypical psychosis are 33% and 0%, respectively. With earlier identification, this stability may be lessened, since longitudinal-course-related variables have not yet become manifest.

Diagnostic reassessment several times per year is recommended. Use of diagnostic criteria checklists or direct consultation of DSM-IV is likely to result in greater diagnostic precision. Failure to re-diagnose can result in problems such as the possible application of inappropriate treatments in the future, provision of inappropriate educational information, or the development of misleading expectations on the part of both patient and treatment professionals.

Section IV

TREATMENT

Treatment

The information provided here on pharmacological and psychosocial treatments is intended to be generally applicable to many forms of service delivery. For example, a family physician working alone may use this guide as a framework for a general approach, a prompt to seek out other appropriate resources, or as a source for specific medication information. Those working within multidisciplinary teams may compare the style and content of the services they provide to the approaches discussed here. More specialized interventions are not presented in exhaustive detail. Rather, evidence for their effectiveness is presented, along with references that the reader can consult for more information on specific procedures.

General treatment principles

The development of a strong working alliance facilitates successful ongoing treatment.

Development of the therapeutic relationship may take precedence over treatment initiation in order to increase the probability of long term success. All too frequently, alliance is forsaken because of demands on staff time or because its importance is not recognized.

The patient's initial discomfort should be minimized.

Professional caregivers now recognize there are many opportunities for the person with psychosis to become distressed or traumatized. These can include

- the nature of the symptoms (hallucinations, passivity experiences, delusions, etc.)
- insight that something is terribly wrong
- coercive or confusing admission procedures
- poor interviewing styles
- bothersome or dangerous side effects from treatment.

Minimization of distress and trauma is therapeutically beneficial over both short and longer terms.

Treatment should target a broad range of treatment goals.

Treatment should be comprehensive, individually tailored and adhere to best practices. General goals for treatment include

- amelioration of psychotic symptoms
- rapid and effective re-entry into the person's normal roles and environments
- prevention of secondary morbidity
- prevention of relapse
- retention of a positive self-concept and self-efficacy
- maximization of quality of life.

Diagnostic classifications frequently demand temporal criteria, yet the individual is clearly suffering before a diagnosis can be definitively assigned. Therefore, the patient should be treated initially for manifest psychopathology. Although merely treating symptoms is at odds with the principle of treating syndromes, it is consistent with the fact that antipsychotic medications basically treat psychosis and are not anti-schizophrenia medications.

The rate of comorbid psychiatric conditions in those with psychosis appears to be over 50% (77), even in first-episode cases (78). The presence of symptoms suggesting co-morbid conditions must therefore be carefully assessed. Only after this assessment is done can a judgment be made regarding whether the symptoms can be considered integral to the primary or provisional diagnoses. This may be difficult. For example, although panic attacks may be an associated feature of schizophrenia, the treating team must evaluate the presence of certain cognitions about the attacks that, if present, would merit making a diagnosis of panic disorder. Simply dismissing the presenting symptom (panic attacks) as a part of a schizophrenia presentation could deprive the person of needed treatment. Similar arguments could be made for other conditions including obsessive-compulsive disorder, post-traumatic stress disorder, major depressive disorder and substance abuse disorders.

General principles treatment / continued

Professional involvement should be ongoing and intensive, and significant interruptions should be avoided.

The levels and types of interventions will vary according to individual readiness. The concept of a critical period wherein early course predicts later course, suggests that ongoing intensive involvement should occur for at least several years after the resolution of the initial episode (6). Solid evidence to confidently inform the duration and intensity of numerous interventions is generally lacking. Further, discontinuities in care can confuse and upset a patient and result in uneven treatment applications. These disruptions pose potential threats to engagement and may lead to relapse either directly or via non-adherence to treatment. In many jurisdictions the transition from youth to adult services is especially awkward.

Practices should be age-appropriate and stage-appropriate.

Specific interventions are appropriate to different stages of a disorder. Both pharmacological and psychosocial interventions are affected by this principle. Similarly, the content and process of interventions should be consistent with the developmental stage of the individual.

The pace and timing of reintegration should be carefully considered.

Successful rapid reintegration back into social, occupational/scholastic and other roles is a primary goal of early intervention. The pace and extent of return to each area calls for sensitive handling. Confidence and self-esteem can easily be damaged if the individual experiences failures rather than successes. Careful assessment and planning are needed to avoid problems such as academic failure that can occur when the individual is expected to assume a full course load from where he or she left off. Intellectual declines and cognitive deficits may persist, even though symptomatic remission has been attained.

Family involvement is important.

Despite significant evidence that family involvement leads to lowered relapse rates, improved patient functioning, and enhanced family well-being (79) (80) (81) (82) (83) (84), delivery of mental health services to persons with psychosis often bypasses the family (85). Families need support both for themselves and to assist the ill family member. Recognizing the enormous implications to a family when a member develops a psychotic disorder, the alleviation of family disruption should be fostered along with engagement of the family as a therapeutic partner. Most people who are ill do much better with the ongoing help and support of their family. Collaboration between care providers and families should begin immediately, with consideration given to the pace and extent to which a family can participate. Involving families in the therapeutic process benefits both patient outcome and family well-being. Regardless of the patient's age, family involvement should be part of a specific treatment plan rather than informal and as needed. Families should be actively approached and engaged as early as possible. Work with the family should include supportive counselling, psychoeducation, relapse prevention, stress management, and enhancement of coping skills.

Acute inpatient presentations

SPECIAL CONCERNS REGARDING HOSPITALIZATION

The experience of the early psychosis patient is markedly different from the experience of someone who has been hospitalized repeatedly. Numerous reports indicate that first-episode patients find their initial hospital experience to be traumatizing (25). Inpatient staff should promptly allay any unfounded fears that first-episode patients may have, or concerns that they will inevitably come to resemble some of the more chronic patients seen in inpatient settings. Instructions regarding how to maintain personal safety may be of benefit if there are potentially aggressive patients on the ward. Inpatient staff should attempt to include family or close friends in as many intake procedures and interviews as possible. It is important that proceedings be explained to the patient and family, and that realistic reassurance regarding shorter-term outcomes be given. Early psychosis patients should be assigned priority for private rooms.

HANDLING EMERGENCY DEPARTMENT PRESENTATIONS

A patient in crisis presenting at hospital emergency may show significant behavioural difficulties. An expert consensus panel has published its recommendations on appropriate procedures to manage behavioural emergencies (86). In such situations staff must be aware of the factors that can jeopardize or enhance their own safety. Measures that minimize risk include an open demeanor, room logistics (e.g., a safe escape route, a location for conducting assessments in clear view of other staff), and the ability to quickly access security personnel. One of the most important forms of psychological management is to approach an anxious or agitated patient openly and genuinely to contain the situation verbally. This includes communicating a reasonable summary of the situation along with your psychiatric concerns in a clear, easy-to-understand manner. Tone of voice should be soft and non-threatening. Clinicians should describe the treatment plan and sequence of upcoming events as a set of short-term and longer-term goals. If verbal containment is not adequate to complete the assessment or allay agitation, pharmacological methods may need to be employed as described in the Pharmacotherapy section.

SECLUSION AND RESTRAINT

Seclusion and restraint are measures of last resort used when there exists a threat of imminent physical harm to patient and staff or, more rarely, when significant property damage is occurring. These procedures should be used for the minimum time necessary and should be preceded by a clear explanation of the reason for their implementation. When the seclusion or restraint procedures are terminated, it is important to discuss with the patient the expectations for his or her behaviour and restate the treatment plan. The use of seclusion and restraint in early psychosis cases is especially worrisome since it can seriously damage the relationship between the patient and mental health services (87). One study found that patients reported a preference for medication over physical restraint in psychiatric emergencies (88). Further discussions of some of the medical and ethical questions involved in the use of restraint can be found elsewhere (see (89) (86)).

PHARMACOTHERAPY
Status of typical antipsychotic medications

Older antipsychotic medications ("typicals") have been successfully used for almost 50 years. Though effective at reducing psychotic symptoms, they're often associated with various acute and chronic side effects, including significant motor effects (90) (91).

There is no evidence that proves superiority of one typical compared to any other in the treatment of psychotic symptoms (92). This may to be due to the finding that all typical antipsychotics effectively antagonize the dopamine subtype 2 receptor (D2) (93). There appears to be a narrow window of D2 blockade between antipsychotic efficacy and the development of adverse side effects. For example, while less than 70% D2 blockade does not ameliorate psychosis, prolactin starts rising at 72% blockade and extrapyramidal symptoms emerge at close to 80% D2 occupancy (94). Given their therapeutic similarity, choice of typical antipsychotic has generally been made on the basis of other variables such as type and degree of side effects, patient preference, availability, and the presence of other psychiatric disturbances.

In some instances, the side effect associated with a drug is useful therapeutically. For example, sedation may be desirable in a patient who is agitated, anxious, or unable to sleep. Thus, a clinician using a typical antipsychotic might choose one from the low potency group (e.g., chlorpromazine) since low potency typicals have a high affinity for histamine subtype 1 receptors (H1) in addition to cholinergic receptors. An understanding of receptor functions helps clinicians to understand the effects associated with different medications, as described in the following table:

Receptor Profiles and Medication Side Effects

Receptor	Side Effects
Dopamine (D2)	extrapyramidal, elevated prolactin
Acetylcholine (Muscarinic - M1)	blurred vision, dry mouth, urinary hesitation, cognitive impairment, constipation
Histamine (H1)	sedation, weight gain
Serotonin (5HT2A)	increased appetite, sexual performance difficulties
Adrenergic (alpha1)	hypotension, nasal congestion

Of course, all predictions of effects on the basis of receptor profiles is influenced by dose. A drug with a low affinity for a specific receptor may still create a side effect associated with that receptor if the dose is increased sufficiently. However, the increased dose would also affect other receptors and produce consequent effects associated with those transmitters.

Status of atypical antipsychotics

"Atypical" antipsychotics developed over the past two decades are much less likely to produce the types of side effects often found with the typical antipsychotics. Atypical antipsychotics (e.g., clozapine, risperidone, olanzapine, quetiapine, and ziprasidone) have all been shown to decrease positive and negative psychotic symptoms (95) (96). Numerous reviews have noted that all antipsychotics reduce negative symptoms significantly more reliably than placebo, with some data showing that risperidone and olanzapine do so slightly better than typicals (96) (97). Atypicals are associated with fewer extrapyramidal side effects and reduced need for anticholinergic medication (98) (96). They also carry more benign side effect profiles in a number of other areas (99).

The atypical antipsychotics can roughly be grouped into those resembling clozapine (olanzapine and quetiapine) and those that do not, but have similar receptor profiles (risperidone and ziprasidone) (100). Clozapine has high affinity for many receptors including 5HT2A, M1, H1 and D4, while olanzapine is similar but has higher D2 and D1 affinities. The other group of atypicals has high affinities for D2 and 5HT2A receptors along with their adrenergic alpha1 blocking characteristics. All atypicals have a high 5HT2A to D2 receptor ratio. It is believed that 5HT2A blockage in the striatum increases dopamine transmission and therefore lessens the tendency to cause extrapyramidal side effects (which is caused by reduced dopamine transmission in the striatum).

Antipsychotics with high affinities for cholinergic receptors are less likely than those without such affinities to generate extrapyramidal side effects, and most atypicals tend to have anticholinergic activity. The exception is risperidone which, if given in higher doses, induces more extrapyramidal side effects than other atypicals. The sedating potential of a drug can be reasonably predicted by its ability to antagonize H1 receptors. The rank order of H1 blockade for selected antipsychotics starting with the highest is: clozapine, olanzapine, chlorpromazine, quetiapine, fluphenazine, risperidone and haloperidol (101).

Availability of different antipsychotics

Both typical and atypical or antipsychotic medications are useful to treat first episodes of psychosis (102) (97). In British Columbia, virtually all well-researched typical antipsychotics, along with the atypical medications risperidone and quetiapine are designated under the provincial health insurance plan as available for use as first line medications. Olanzapine may only be used after a trial period with another antipsychotic.

Olanzapine and risperidone are the only atypicals for which there exist reported data from clinical trials showing efficacy in early psychosis (98) (103). Peer reviewed publications document the efficacy of risperidone and olanzapine in first-episode cases, although no such data currently exist for quetiapine. Ziprasidone has yet to receive regulatory approval in Canada, and data from controlled trials for its use in first-episode psychosis are lacking. Clozapine has been shown to be effective for treatment-resistant first episodes (104). It is generally reserved for refractory cases, because its associated risk of agranulocytosis necessitates rigorous monitoring procedures.

Target symptoms

Advances in assessment and delineation of various components of psychotic symptomatology have led to an emphasis on treatment of negative, as well as positive, symptoms of psychosis (105). Depression, anxiety, aggression, and other symptoms are commonly found along with psychosis and cognitive deficits.

Targets should vary according to individual presentations. Although pharmacological treatments should ultimately target all of the above symptoms, wholesale polypharmacy is neither recommended nor proven to be beneficial (85). Rather, it is recommended that treatment begin with one antipsychotic. If initial presentation suggests the presence of an affective disorder, an appropriate mood stabilizer or antidepressant should also be started.

Response to treatment should be defined multi-dimensionally, with consideration given to psychotic symptoms, mood, social and occupational functioning, acute and chronic side effects, cognition, subjective response, and quality of life.

First-episode response to antipsychotics

The vast majority of patients with schizophrenia or schizoaffective disorders will show a good symptomatic response to antipsychotic medication (17). Most improvement tends to occur within the first six months of treatment (106). Trials lasting shorter periods reported response rates of around 60-70% on atypicals (107) (103) and 50% on typical antipsychotics (108).

Data for established illness demonstrate that all atypicals are superior to placebo (96). The effectiveness of risperidone and olanzapine several years after onset appear similar (95). Quetiapine has been shown to be effective in patients partially responsive to typical antipsychotics (109) and suffering from acute exacerbations of psychosis (110). However, quetiapine may not offer better amelioration of negative symptoms than haloperidol, risperidone, or olanzapine (96). Trials examining quetiapine and ziprazidone in first-episode cases have not been conducted. Use of quetiapine in first-episode schizophrenia is limited. One case report documented use of a 600 mg dose to achieve symptomatic amelioration (111). An open trial involving 15 adolescents with a variety of diagnoses found a significant reduction in psychotic and manic symptoms at an average dose of 467 mg/day (112).

Both typical and atypical antipsychotics are effective treatments for mania (113). The literature on antipsychotic medications in first-episode mania is sparse. A recent study found that 84% of bipolar patients attained syndromal recovery within six months (80% of the sample had psychotic features) compared to 59% syndromal recovery among patients with non-affective psychoses (114).

Predictors of response in first-episode psychosis

Male sex, a history of obstetrics complications, more severe symptoms, younger age of onset, and the development of parkinsonian symptoms predict poorer initial response to medication (17) (15) (115) (116) (117). Poor premorbid adjustment has been related to lesser remission of positive symptoms (118), insidious onset, poorer social course, and persistent negative symptoms (119) (15).

Other targets for antipsychotic medications

COGNITION

Cognitive performances appear to improve on all atypicals (albeit in slightly different domains), whereas typicals generally do not lead to cognitive improvement (18) (40) (120). Clinicians should be aware that anticholinergic effects impair several cognitive abilities (120).

DEPRESSION AND SUICIDE

Some research suggests that antipsychotics lower the risk of suicide (121), with evidence being strongest for clozapine (122). Significant reductions in depression have been reported for risperidone, olanzapine, quetiapine, and ziprasidone (123) (124) (125) (126).

AGITATION AND AGGRESSION

Many antipsychotics have been used to control agitation. Some evidence suggests that clozapine use in particular may be associated with decreased aggression over extended periods (126).

SUBSTANCE ABUSE

Typical antipsychotics may be less effective in controlling psychotic symptoms in individuals with schizophrenia and substance abuse (127), and higher doses may be required to achieve stabilization (128). Additionally, typical antipsychotic medications do not appear helpful in decreasing substance abuse, and there is some evidence that they might even be associated with increased use (129) (130) (131). A number of case studies and non-controlled studies suggest that clozapine is effective in reducing both psychotic symptoms and substance abuse (132) (133) (134) (135). There is less available data for the other atypical antipsychotics but preliminary data is promising (136) (137).

RATIONALE FOR USE OF ATYPICALS IN EARLY PSYCHOSIS

- effective at treating psychotic symptoms
- less likely to cause adverse side effects that produce non-adherence
- appear to have beneficial effects on cognition
- appear to effectively treat some non-psychotic symptoms
- may be associated with less hospitalization

Acute phase

STARTING MEDICATION TREATMENT

Treatment should be initiated as soon as possible. An antipsychotic-free period for a few days may be useful if there are any possible diagnostic concerns (such as substance involvement). If necessary, antipsychotic treatment can be delayed for weeks without adversely effecting outcome (138).

Perhaps because young people are usually more sensitive to both beneficial and negative effects of antipsychotic medications (139), there is increasing evidence that much lower doses are needed (140, 141). The motto "start low and go slow" is indicated.

Doses of less than 3 mg risperidone (142) and about 2 mg of haloperidol have been shown to be optimal in first-episode cases (140) (143). In a study with 106 patients of which 32 were neuroleptic-naive patients, 73% attained remission after five weeks on an average of 3.4 mg (+/-2.3mg) of haloperidol (144).

Medication	Starting Daily Doses
Haloperidol	1 mg
Risperidone	0.5-1 mg
Olanzapine	2.5-5 mg
Quetiapine	To be established (50-100 mg ?)
Ziprasidone	To be established (5-20 mg ?)
Chlorpromazine	75-125 mg

Acute phase / continued

PHARMACOTHERAPY PRIORITIES IN THE EMERGENCY DEPARTMENT

Several general pharmacotherapy strategies apply to presentations in hospital emergency (86).

- In prescribing medications, determine if any psychiatric medications are currently prescribed. If so, it is advisable to continue with those medications, rather than switching to a new agent.
- Reserve as-needed medications for situations (such as anxiety or mild aggression) in which psychological interventions prove ineffective. If as-needed medication is required, benzodiazepines, rather than antipsychotics are recommended.
- The use of benzodiazepines allows for observation of the presenting symptoms and their course over the initial few days as well as time to investigate possible etiologies of the presenting psychosis. Use of atypical antipsychotics should be considered after the initial period of observation when the psychosis persists and the provisional diagnosis appears more robust.
- Moderate agitation may be treated with low to moderate doses of benzodiazepines (e.g., 1-2 mg lorazepam given orally or sublingually) while severe agitation usually merits higher doses (e.g., 3-4 lorazepam).
- If a patient is combative, a show of force may be helpful along with the offer of higher doses of benzodiazepines (e.g., 3-4 mg lorazepam) given orally if possible or intramuscularly, if necessary. When a combative patient fails to respond to the above interventions then a combination of an intramuscular benzodiazepine and a moderately sedating antipsychotic might be considered.
- A patient may require an injectible benzodiazepine (e.g., 2 mg lorazepam) and antipsychotic (e.g., loxapine 5-25 mg) depending on his or her size, ethnicity, and level of agitation. A new injectible form of olanzapine has been developed that may be useful in this regard. If repeated doses fail to settle a patient, the use of zuclopenthixol (Accuphase) represents a viable option, as its effects last for several days. However, the use of injectible antipsychotics prompts questions about the impact upon patient autonomy and informed consent (145).
- Liquid risperidone and the rapidly dissolving olanzapine pill represent further medication delivery strategies for patients in whom normal oral medication is problematic.

Acute phase / continued

PHARMACOKINETICS AND DRUG INTERACTIONS

Oral doses of atypical antipsychotics usually reach peak plasma concentrations after 2-4 hours, are metabolized in the liver, and have half-lives of 20-40 hours (146). The use of polypharmacy is generally discouraged. However, in many cases, several medications may need to be concurrently administered.

Although the following interactions are far from exhaustive, they do represent several of the more common situations that may be encountered (146) (147). Cytochrome P450 enzymes metabolize many psychiatric drugs. Understanding the effects involving cytochrome P450 enzymes has implications for avoiding unwanted drug interactions and for developing rational dosing strategies (148) (149).

- All antipsychotics decrease the effects of dopamine agonists.
- Carbamazepine increases clearance of most atypicals.
- Quetiapine clearance is increased by phenytoin and decreased by cimetidine.
- Quetiapine increases clearance of lorazepam.
- Tobacco can lower blood levels of some antipsychotics by up to 50%.
- SSRIs can increase plasma levels of the atypicals.
- Benzodiazepines and clozapine can induce respiratory depression.

PHARMACOLOGICAL CONSIDERATIONS FOR ADOLESCENTS

Typical antipsychotic medications are effective in youth (150). It appears that adolescents' response to atypicals is similar to that of adults (151, 152) (153) (154) (155). Dose finding studies in youth are needed since sensitivity to extrapyramidal symptoms appears to be increased in younger patients (150). Effects on cognition do not appear to have been examined, and long-term data on dyskinesias and other adverse effects are lacking. The new practice parameters for schizophrenia by the American Academy of Child and Adolescent Psychiatry caution that their treatment recommendations are based on the adult literature because of a paucity of research on youth with schizophrenia (70). These guidelines recommend that minimal standards for the use of antipsychotics in adolescents include:

1/ informed consent
2/ documentation of target symptoms, laboratory findings, treatment response, and side effects
3/ trials of sufficient dose lasting at least 4-6 weeks
4/ long-term monitoring
5/ maintenance antipsychotic medication for 1-2 years after the initial episode for first-episode patients.

Acute phase / continued

SIDE EFFECTS OF ANTIPSYCHOTIC MEDICATIONS

Motor side effects

The atypicals present a more favorable side effect profile than the typicals. Neuroleptic-naïve patients are more susceptible to develop extrapyramidal side effects than chronically treated patients (156) (157). In neuroleptic-naïve patients with schizophrenia, risperidone produced less extrapyramidal side effects than haloperidol (141). Patients with mania may also be more vulnerable to developing acute dystonia than patients with schizophrenia (158). In general, extrapyramidal side effect rates are lower for all atypicals compared to typicals (97). Whereas approximately 4% of patients receiving typical antipsychotic medications will develop tardive dyskinesia each year (68) (159), the one-year risks are 0.52% for olanzapine (160) and 0.3% for risperidone (99). Data are not available for TD risks from quetiapine or ziprasidone.

Elevated prolactin and sexual side effects

The atypicals, with the exception of risperidone (161), are much more prolactin sparing than the typical antipsychotics (162) (163). In women, hyperprolactinemia may cause amenorrhea, galactorrhea, vaginal dryness, hirsutism, reduced bone density and decreased libido. In men, it can result in erectile dysfunction, ejaculatory dysfunction, gynecomastia, hyperspermatogenesis and decreased libido. Younger women may be especially prone to these side effects because their higher estrogen levels (e.g. on birth control pills) may potentiate the prolactin-elevating properties of typical antipsychotics (164) (165). One study found that over 50% of males reported sexual difficulties while treated with typical antipsychotics and over 90% of women reported menstrual changes (166). These changes were associated with elevated prolactin levels. Among bipolar patients over 50% reported sexual dysfunction when treated with benzodiazepines and lithium (compared to 17% treated with lithium and any other drug) (167). Treatment with bromocriptine or amantadine (168) may be effective but the risk of exacerbating psychotic symptoms must be considered (169). Dose reduction has been the treatment of choice to date.

Weight gain

All antipsychotic medications can cause weight gain (90). Among atypical antipsychotics, clozapine appears to cause the most weight gain followed by olanzapine, quetiapine, and then risperidone. For example, quetiapine, one of the two drugs least likely to cause weight gain, is associated with greater than 7% increase over baseline in about 25% of patients with the gains continuing over the first year of treatment (170). Weight gain on olanzapine appears to be associated with younger age (171). Ziprasidone appears not to cause weight gain but the data are limited to several short trials and one study lasting one year in which placebo-treated subjects also lost an average of three kilograms (170). Lithium and valproate are considered more likely to cause weight gain than carbamazepine (172).

Weight is best monitored by taking a baseline measurement of Body Mass Index (weight in kg/height in meters^2). The Canadian Practice Guidelines recommend monitoring lipids and glucose if the Body Mass Index increases by 10% (69). The Body Mass Index should be calculated monthly for the first 6 months, or weekly if rapid weight gain is occurring. Significant weight gain could be a risk factor for non-adherence, especially in young females. It also poses increased risk for other obesity-related disorders such as diabetes and heart disease.

Acute phase / continued

SIDE EFFECTS OF ANTIPSYCHOTIC MEDICATIONS, continued

Weight gain, continued

Dietary strategies and exercise remain the principal treatments for weight gain. Support groups may be helpful to some individuals. Atypicals have also been implicated in the exacerbation or precipitation of diabetes regardless of the amount of weight gain (173). Risperidone appears to be the sole atypical that has not been implicated in reports of impaired glucose regulation. Caregivers in both community and inpatient settings should take baseline glucose measures and continue monitoring over time.

Other side effects

Most sedation from atypicals is transitory (174). Low potency medications such as clozapine and chlorpromazine appear to pose a greater risk of sedation than most high potency typicals. However, the atypicals olanzapine, quetiapine and risperidone all appear more sedating than haloperidol (172). Jaundice is an infrequent occurrence with antipsychotic medications but has been found in 1-5/1000 patients on chlorpromazine (68). Leucopoenia has been found in almost 10% of patients on chlorpromazine with 0.3% developing agranulocytosis. Extensive blood monitoring must be undertaken with clozapine use because of the 1% rate of agranulocytosis (175). Clozapine also has a dose-dependent risk for seizures with an overall rate of 2.8% (68).

Overdose of antipsychotic medications rarely causes death unless accompanied by alcohol/drug ingestion or preexisting medical conditions (68). Treatment of overdose is symptomatic and supportive. Neuroleptic Malignant Syndrome has been associated with virtually all antipsychotic medications including atypicals (176) (177). Antipsychotic medications should be discontinued immediately and symptomatic treatment instituted.

The rate of sudden death among those on antipsychotic medications is not higher than for the general population (68). Nevertheless, the risk for heart arrhythmias may be lessened by using low doses of medications, ensuring patients are well hydrated, monitoring vitals and, finally, minimizing use of restraints since cardiovascular and autonomic instabilities could result from the interaction of agitation/stress and medication effects (68). Failure to understand the patient's subjective experience of both mental and physical side effects can lead to treatment failure because the patient may develop a negative attitude to the medication and cease to take it (178).

Treatment of side effects

Anticholinergic medications such as benztropine are effective for treating extrapyramidal symptoms. They may also be used prophylactically. Because of the very high rates of extrapyramidal side effects in neuroleptic-naive and young patients, anticholinergics should be used if the initial medication is a typical antipsychotic given in more than very low doses. Prophylactic use of biperiden dropped the rate of dystonia in first-episode cases from 60% to 7% (157). When very low doses of typicals or risperidone are used, the rates of extrapyramidal side effects are low, and anticholinergic medications are not needed. If extrapyramidal side effects develop during treatment with an atypical, the dose should be lowered.

Acute phase / continued

ASSESSMENT OF RESPONSE

Psychotic and other psychiatric symptoms, side effects, daily functioning, and subjective response should all be assessed repeatedly. Assessments should occur on multiple occasions in the first week and at least biweekly for the first month. Response is best assessed in the context of the types of target symptoms identified. For example, agitation should respond within days, while negative symptoms may take much longer to respond. Clinicians should not solely rate improvement according to positive symptoms. The use of rating scales helps to objectify progress – especially over time – and is suitable for routine clinical use. Several measures are listed in the section, Measuring Effectiveness.

INCREASING DOSES

An initial period of about one to two weeks should allow the clinician to determine if the patient is tolerating the medication and deriving benefit. Positive symptoms, along with general symptoms such as anxiety and agitation, often show discernible improvement within one week. A recent first-episode study that restricted haloperidol doses to 1 mg for the first four weeks found that 55% of patients remained stabilized on that dose (179). Further, 83% remained on haloperidol after a 12-week trial at an average dose of 1.78 mg per day. The concept of a "neuroleptic threshold" (dosing to the threshold of motor side effects) has been used successfully in several first-episode studies using typicals to keep doses and side effects low while attaining excellent clinical responses (144) (140).

A European guide that lists the approximate lowest doses expected to be effective helped form the table below (100). The list is derived either from studies using the drugs in early psychosis, or by calculating chlorpromazine equivalents. Of course, many patients will require significantly higher doses.

Expected Lowest Effective Doses

Medication	Dose in mg/day
Haloperidol	2
Risperidone	1 - 2
Olanzapine	5
Quetiapine	150
Chlorpromazine	100

Up to 30% of first-episode cases of schizophrenia will not respond within six weeks of treatment. Since non-responders taking reasonable doses do show adequate binding to D2 receptors, it is unlikely that dose increases will be effective (100). Instead, switching to another medication should be considered.

Acute phase / continued

UTILITY OF ANTIPSYCHOTIC PLASMA LEVELS

About 75% of first-episode responders to low-dose haloperidol had blood plasma levels well below those commonly believed to be associated with response (140). Therefore, plasma monitoring is not recommended as a good predictor of response but may be undertaken to assess non-adherence, to identify unusual drug metabolism when a seemingly adequate dose fails to produce an adequate clinical response, and to help distinguish psychopathology from side effects (85).

USE OF OTHER MEDICATIONS

Little is known about the use of adjunctive agents such as antidepressants, benzodiazepines, and mood stabilizers in first-episode cases of schizophrenia, because most studies utilized refractory chronic patients (85). The use of two antipsychotics in first episodes is generally unwarranted.

Benzodiazepines

The benzodiazepines are helpful in managing sleep disturbances, agitation, and anxiety very early in the treatment process. Benzodiazepines also appear to possess some antipsychotic activity, albeit considerably less than antipsychotic medications (180). Their use can foster greater diagnostic clarity and improve engagement. Benzodiazepines may be beneficial adjuncts to antipsychotics in reducing positive symptoms, anxiety, agitation, and overall psychopathology (85) although these effects may be limited in duration (68). If a benzodiazepine is used with an antipsychotic, the dose of antipsychotic should be lowered. Given that benzodiazepines can cause disinhibition, abuse, and rebound withdrawal symptoms, their use for more than brief periods demands caution.

Mood stabilizers

Lithium used alone for schizophrenia is likely to be ineffective or even to worsen symptoms, but it may enhance the effects of antipsychotics when given adjunctively (68). Lithium should not be employed before an adequate trial of an antipsychotic alone. The lithium add-on should show a beneficial response in most patients within four weeks. Clinicians must closely monitor for lithium toxicity, since lithium-antipsychotic combinations place patients at greater risk for side effects including Neuroleptic Malignant Syndrome (68). Valproate and carbamazepine are not effective antipsychotics, but may have a role in patients with persistent agitation, aggression, or EEG irregularities (68).

If a first-episode psychosis patient presents with mania and the clinician suspects bipolar disorder, treatment with an antipsychotic and either lithium or valproate is recommended. Benzodiazepines can also be considered if severe behavioural disturbance is present (181) (66) (182). Failure to derive a good response after three weeks may prompt use of a second mood stabilizer as well, (e.g., carbamazepine or a different antipsychotic). Atypicals appear to hold promise as monotherapy in the treatment of bipolar disorder (183) (184) (185). Also, both olanzapine and risperidone have been shown to be effective adjuncts to mood stabilizers in persons with bipolar or schizoaffective disorders (186) (187).

The relapse rate in persons with bipolar disorder on lithium is about 35% compared to about 80% on placebo (188). Withdrawal from lithium can lead to a higher rate of relapse than placebo. Valproate and carbamazepine are also both effective maintenance agents (66).

Acute phase / continued

USE OF OTHER MEDICATIONS, continued

Antidepressants

The covariation of mood symptoms with psychotic symptoms in many patients with schizophrenia suggests that depression is integral to the illness and that monotherapy with an antipsychotic is viable (29). Others argue that neuroleptics themselves produce depressive symptoms that are distinguishable from akinesia (189).

Although antidepressants, ECT, and mood stabilizers are all effective treatments for depression in bipolar patients (190), their place in treating schizophrenia is less clear. Antidepressants may not be particularly helpful once the illness is established (191) (192). Nevertheless, the use of antidepressants is justified if antipsychotic monotherapy fails to adequately treat depressive syndromes (85). With respect to early psychosis, initially prescribing antidepressant medications cannot be condoned when reluctance to start antipsychotics is simply due to the lack of a definite diagnosis of schizophrenia. Furthermore, evidence exists that antidepressants can induce mania in bipolar patients (115).

SWITCHING AFTER A PARTIAL OR POOR RESPONSE

When a patient fails to show significant improvements within four to six weeks, the clinician should consider switching to another medication. A poor initial response is not cause for therapeutic pessimism, since about 16% of early unremitting cases will achieve late-phase recovery (3). As noted previously, the use of two antipsychotics in early psychosis is generally unwarranted.

Switching antipsychotics early in the course of illness can be an opportunity for significant improvement, but it may also lead to worsening of symptoms and decompensation. Although there is little scientific evidence regarding switching, clinical experience suggests that switching medications may be advisable

- when target symptoms of psychosis persist
- when side effects are distressing or do not respond to treatment
- when there is a relapse despite adherence
- to reduce polypharmacy (e.g., reduce need for anticholinergic medication)
- when the patient or caregiver are dissatisfied with the current treatment.

Prior to switching, adequate discussion should be undertaken regarding the risk of symptom exacerbation and length of time that might be needed to see results. When difficulties arise during a switch (such as symptom exacerbation), the clinician should consider whether the dose is adequate, whether side effects are confounding the switch, whether the change technique may be creating the difficulty, or whether the patient is experiencing a rebound phenomena (e.g., following removal of highly anticholinergic medications). Symptoms of anticholinergic rebound include vomiting, loss of appetite, malaise, diarrhea, rhinorrhea, sweating, anxiety, agitation, and insomnia. Management consists of reintroducing the antipsychotic and tapering more slowly or transiently adding another anticholinergic medication such as benztropine.

Acute phase / continued

SWITCHING AFTER A PARTIAL OR POOR RESPONSE, continued

CRITERIA FOR CONSIDERING CLOZAPINE

Clozapine is regarded as the gold standard in treatment-resistant cases (193) (194). The clinician must decide how long to wait before a treatment-resistant patient is prescribed clozapine. The American Psychiatric Association Guidelines for Schizophrenia suggest that an acute episode be treated with either one typical or atypical for six weeks. If response is poor after six weeks, these guidelines recommend consideration of clozapine (68). A set of expert consensus guidelines suggests use of one typical then a trial of an atypical before switching to clozapine (67). The Texas algorithms suggest three trials before clozapine (195) while the PORT group recommended two trials from different classes of either typicals or atypicals (85). The Canadian Clinical Practice Guidelines for Schizophrenia imply that physicians consider one trial of a typical and at least one, if not two, trials of atypicals before moving to clozapine (69). The only guidelines specifically written to date for early psychosis (45) advocate two six-week trials of atypicals, then either adding lithium to the atypical or going directly to clozapine.

Therefore, it is suggested that clozapine should not be considered before at least two trials, at least one of which should be either risperidone or olanzapine. Each trial should last at least four to six weeks, unless discontinued earlier due to side effects.

SWITCHING PROCEDURES

Several switching paradigms exist, and none is unequivocally superior to the others.

In the abrupt stop and start method, the old medication is stopped completely and the new medication is begun at, or close to, a full dose. This method is frequently used for inpatients or when serious adverse events occur. It can work well when patients are being switched from a depot to an oral agent. Disadvantages include the possibility of symptom flare-up and anticholinergic or extrapyramidal side effect rebound.

In the gradual cross-taper approach, the old and new medications are gradually interchanged. This process can take weeks or months. Advantages include a low risk for anticholinergic or extrapyramidal side effect rebound. Disadvantages include the possibility that neither medication will be at a therapeutic level for some time, creating a risk of relapse. In addition, polypharmacy can create or worsen side effects.

The third method involves reaching a therapeutic dose of the new medication and only then gradually reducing the dose of the old medication. This final method has the perceived advantage of less symptom exacerbation but involves the risks inherent in polypharmacy. The results of a study that examined switching to olanzapine from typicals or risperidone found that achieving a therapeutic dose of the new medication before gradual withdrawal of the old agent resulted in fewer relapses (196).

Maintenance phase

DURATION OF TREATMENT FOLLOWING A GOOD RESPONSE

An expert consensus guideline document recommended that a first-episode patient with schizophrenia who shows a good initial response to medication and is able to return to work full time should be maintained on the medication for 12-24 months before considering dose reduction and discontinuation (67). An evidence-based report recommended at least one year of maintenance therapy after an acute episode (85). Guidelines for children and adolescents also recommended 12-24 months of maintenance (70). However, the data from at least one study using typical antipsychotics in first-episode schizophrenia suggested that patients receive maintenance medication for two to five years after initial recovery because of the increased risk of relapse, especially in those who discontinue medication (197). The influences of the atypical antipsychotics and specialized early psychosis psychosocial interventions on relapse and course remain unresolved at this time. Therefore, it is recommended that patients with first-episode schizophrenia remain on maintenance medication for a minimum of one to two years.

Psychotic disorders other than schizophrenia merit shorter maintenance periods after symptomatic recovery, although close monitoring is essential. For example, with first-episode manic patients it is common practice for antipsychotics to be discontinued in about 75% of patients within six months (114). Research on combined lithium/antipsychotic therapy in bipolar patients suggests that discontinuation of the antipsychotic shortly after resolution of the psychotic symptoms is not recommended (198). Successful discontinuation of the antipsychotic was associated with shorter duration of illness and first-episode status.

Patients frequently discontinue medications when they have recovered from a first episode. Unfortunately, there is no reliable way to predict who belongs to the substantial subgroup of persons with schizophrenia (about 20%) who will not experience a second episode regardless of whether they take maintenance antipsychotic medication. Therefore, some researchers and clinicians have advocated a medication strategy that entails restarting the antipsychotic at the first signs of a relapse. Relapse rates using this “intermittent targeted” approach are higher than when medication is continuously prescribed (199). Restarting medication before the person is in crisis does produce less risk of relapse than starting after a crisis has begun. However, both these strategies are less effective in preventing relapse than staying on a low dose. A low dose was itself only slightly worse than staying on a regular dose (200). Symptomatic exacerbations in recent-onset schizophrenia when off medication can be successfully managed in most cases by providing support and restarting medication rather than resorting to hospitalization (201). Also, some researchers are examining drugs other than antipsychotics using the intermittent approach. One recent study showed that diazepam significantly outperformed placebo (as did fluphenazine) in preventing progression from early warning signs to full relapse (202).

Maintenance phase / continued

DURATION OF TREATMENT FOLLOWING A GOOD RESPONSE, continued

Despite the fact that an intermittent dosing strategy is less than ideal, it will occur in clinical situations quite frequently. If the person has had only one episode, experienced a complete symptomatic recovery, and is willing to be closely followed but is very reluctant to take medication, it might be acceptable to try the intermittent approach. However, for someone with schizophrenia who has relapsed quickly, medication should probably be maintained for at least five years (68).

In general, a patient in the maintenance phase is well served through

- close monitoring,
- timely review of the diagnosis
- keeping the dose as low as possible
- facilitation of ongoing psychosocial interventions
- ensuring easy access to services if a relapse appears possible.

CONSEQUENCES OF STOPPING TREATMENT

About 60% of patients who recovered from a first episode of psychosis relapsed within a year if they stopped receiving medication, whereas 40% of those on a maintenance dose of an antipsychotic relapsed (203). Other studies report that 70% of patients with schizophrenia on placebo will relapse within one year compared to 30% on active medication (204) while estimations of "real world" one-year relapse rates of patients on medication are about 50%. When persons with schizophrenia have been taken off typical antipsychotic medication, almost 75% have relapsed within two years (205). A recent analysis of recovered first-episode patients with schizophrenia or schizoaffective disorder found that the cumulative first relapse rate after five years was over 80%. Of those who had a second relapse, 86% had a third relapse within four years after recovery from a second relapse. Discontinuing antipsychotic drug therapy increased the risk of relapse by almost five times. Subsequent analyses controlling for antipsychotic drug use showed that patients with poor premorbid adaptation to school and premorbid social withdrawal relapsed earlier (197).

A recent report highlights the interpretative problems that arise when the definition of relapse varies. When hospitalization was used as a criterion for identifying relapse, only 13% of recent-onset patients with schizophrenia were found to have relapsed within two years after discontinuation of a typical antipsychotic (that had been prescribed for one to two years) (201). When increased symptomatology was employed as the criterion, 96% experienced a "relapse" within two years.

Only six out of 46 patients who suffered symptom exacerbation could not be successfully managed in the community. Therefore, although maintenance medication therapy is associated with lower relapse rates, many patients will either request withdrawal or discontinue on their own. In these cases, clinically supervised discontinuation with rapid reintroduction is preferable to covert non-compliance. A cooperative patient with good insight and a history of excellent response to medication will be a better candidate for supervised withdrawal than one lacking these qualities (206). For a fuller discussion on non-adherence refer to Relapse section.

Summary

Atypicals are recommended as first line agents in early psychosis since, compared to typicals, they have

- the least adverse side effect profile
- equal or better efficacy against symptoms
- better effects on cognition.

There is also evidence that some atypicals may be associated with less hospitalization time, both during the index episode and during the subsequent follow-up (207).

To date, the only controlled trials on early-episode psychosis treated with atypicals used olanzapine and risperidone (208) (69) (45). Recent research has demonstrated that doses effective for early episode psychosis tend to be smaller than the doses recommended when a new atypical comes onto the market (140) (179). The lack of research for quetiapine or ziprasidone means there is little empirically-based guidance as to initial or subsequent dosing for these antipsychotics. It is hoped that studies will soon be forthcoming that demonstrate effectiveness and provide better guidance regarding the use of quetiapine and ziprasidone in early psychosis.

Clozapine should be reserved for treatment of refractory cases. Neuroleptic-naive patients are especially sensitive to both therapeutic and unwanted effects from antipsychotics. Doses should start low and proceed upwards slowly. Simultaneous use of two antipsychotics is discouraged.

SOCIAL AND PSYCHOLOGICAL INTERVENTIONS
Psychoeducation

Psychoeducation should be provided to all persons with early psychosis and their families and should be viewed as an ongoing and intensive process. The content of psychoeducation should be specific to early psychosis, and aim to enhance recovery, promote self-management of illness, and improve coping abilities. Psychoeducation should be individually provided, with ideally both family and patient together. Group psychoeducation may be a useful adjunct to individual psychoeducation.

SCOPE OF PSYCHOEDUCATION

Psychoeducation fosters the knowledge, attitudes, skills, and abilities necessary for a person to manage his or her own illness. Psychoeducation also deals with the emotional aspects of the illness experience (209) (210) (211). Treatment adherence and relapse prevention are often considered to be the main aims of psychoeducation. However, these are embedded in the overall goal of promoting the self-management capacity needed to achieve or recover valued life goals and overall quality of life (212). Similarly, family education is better conceptualized as fostering well-being of the family rather than simply preventing relapse in the patient. Psychoeducation should be offered to all persons with a psychotic disorder, family members, spouses and partners, and other potentially supportive individuals.

Three key emphases for psychoeducation in early psychosis are to help the patient (212):

1/ negotiate "meaning" through a constructive assimilation of the illness experience into his or her worldview

2/ develop "mastery" by acquiring or enhancing the subjective and objective skills needed to exert control over the disorder and its effects

3/ protect "self-esteem" threatened by assaults on self-identity, social roles, relationships, and future plans.

BENEFITS OF PSYCHOEDUCATION

Psychoeducation has been demonstrated to lead to (213) (60) (214) (215)

- improved knowledge, decreased negative symptoms
- improved interpersonal skills
- decreased relapse rates
- shorter hospital stays

In general, more intensive interventions lead to more lasting benefits. Additionally, involving families in psychoeducation results in significantly better outcomes for both patient and family (79) (80) (81) (82) (83) (84). Provision of psychoeducation to both patient and family should be intensive and ongoing. Multiple studies in which psychoeducation was provided on a short-term basis (no more than ten sessions over less than six months) failed to show convincing and long-lasting results for patient outcome (reviewed in (79)), although they may have some positive effects on family sense of support (216) (217). Provision of information over longer periods of time may lead to better outcomes by providing more opportunity to apply knowledge and skills. The risk of relapse is minimized the most when the psychoeducation lasts at least nine months (218). More frequent and longer involvement (e.g., closer to one year) with sessions including both patient and family is associated with better outcomes (79) (218).

Psychoeducation / continued

INVOLVING FAMILIES

When psychosis develops in a close relative, the family may experience reactions ranging from fear to denial. Frequently, the family will attribute the psychotic behaviour to substance abuse, adolescence, family conflicts, or other "explanations." These reactions suggest that the family should actively be sought out and engaged as early as possible.

After the patient has made contact with mental health services, family members should be allowed time to debrief and relate their personal experiences. Misconceptions about psychosis and its treatments should sensitively be corrected (this part of the process can be delayed if it might threaten engagement).

The increased stress experienced by family members as they care for their relative usually leads to significant social disruption and the development of psychological problems (219) (220). Psychoeducation can provide family members with the knowledge and skills necessary to help them care for their relative and to increase their ability to cope.

If the patient seeks to limit family involvement, the basis for this request should be explored, and the importance of involving the family should be clearly explained to the patient. Clearly addressing issues of confidentiality may help alleviate some concerns about family involvement. Adequate psychoeducation for the family should always be provided, even if it must be offered in a venue apart from the patient and by other service providers. This can be accomplished even if the patient does not wish the family to be involved with, or aware of, the details of his or her care.

PSYCHOEDUCATION PROCESS

Psychoeducation should occur during all phases of the illness. It may begin at the help-seeking phase when distress and dysfunction are reframed as "illness-related," and as a reason for receiving outside help (209). Both individuals and families benefit from an explanation of the treatment and from attempts to humanize and normalize the service.

Once the patient enters into mental health services, psychoeducation can facilitate the negotiation of an initial "rationale for treatment" with the patient and family (212). This dialogue should be sensitive to patient's idiosyncratic explanatory models of the illness. Caution should bE exercised about proposing other explanations before the person is ready to consider them (221). It may be necessary to begin by framing the intervention as a response to a specific problem that has been identified as distressing by the individual.

During the early assessment phase, clinicians should convey their familiarity with the condition, the need for prompt intervention, and the message that their symptoms should respond well to treatment (222). People will also require clear explanations about the roles of the involved professionals, treatment options, legal rights, and available supports appropriate to that phase of illness.

More formal psychoeducation should commence once the person's mental state begins to respond to medication – usually within days to a few weeks (212). Psychoeducation should be paced and suitable when cognitive abilities are compromised. The ability to process information may be impaired by psychotic symptoms, cognitive deficits associated with the illness, medication side effects, or emotional reactions to the illness experience (223) (211). Furthermore, some individuals may avoid discussion as they attempt to "seal over" their experiences. Psychoeducation may need to be delayed or tailored to accommodate the patient's inability or unpreparedness to deal with emotionally provocative issues.

Psychoeducation / continued

CONTENT OF PSYCHOEDUCATION

Topics to be covered in psychoeducation

Psychosis –

- Allow the patient and family time to relate their explanatory model of the psychosis and their emotional and behavioural responses.
- Discuss the symptoms and associated features of psychosis.
- Present the etiology of psychosis using a stress-vulnerability framework (see the ensuing section on Educational Frameworks for details).
- Communicate the expectation of recovery.
- Explain why there is diagnostic ambiguity in the early phases of a psychotic illness.

Treatments –

- Provide information on medications and psychosocial treatments (including possible side effects of treatment).
- Help the person come to an acceptable ongoing rationale for treatment.

Recovery –

- Provide information on the factors that enhance and impede recovery.
- Discuss topics such as lifestyle, physical health, socialization, and drug use within this context.

Relapse Prevention (see the section on "Relapse Prevention") –

- Discuss the possibility of relapse.
- Provide information on early warning signs.
- Develop a plan of action for dealing with impending relapse.
- Help the person make lifestyle changes to reduce the likelihood of relapse.

Stress Management (see the section on "Stress Management") –

- Increase coping and control over symptoms and key affected areas of the person's life by teaching stress management strategies.
- Foster use of social supports and services.

Teaching of skills such as structured problem solving, goal setting, and social skills (see the section on "Skills Development") helps individuals assimilate and apply information by actively rehearsing the knowledge, skills, or strategies in question.

Throughout psychoeducation, issues of stigma and demoralization should be addressed. The experience of psychosis should be normalized, and the expectation of recovery should be communicated. Self-management of illness and social reintegration should be encouraged.

Diagnostic uncertainty in early psychosis and the potentially stigmatizing connotations associated with diagnostic labels dictate that psychoeducation should be "problem-focused" rather than diagnostically focused in the early phases. The early psychosis period, with its attendant ambiguity, can be presented as an opportunity for the individual and family to take steps to minimize vulnerability to future episodes and maximize the chances for a full recovery.

Psychoeducation / continued

CONTENT OF PSYCHOEDUCATION, continued

Young persons with psychosis may particularly benefit from general health information. This group is vulnerable to numerous health problems associated with lack of information, high-risk behaviours, homelessness, and malnutrition. Educational topics may include:

- contraception
- sexually transmitted diseases
- drugs and alcohol
- hygiene
- dentition
- exercise
- nutrition
- herbal remedies.

It is important to monitor for signs of health problems that are unreported by an individual, arrange for treatment, and provide needed education.

For persons who have experienced a manic episode, emphasizing maintenance of circadian rhythms may help improve outcome and decrease risk of relapse (224).

EDUCATIONAL FRAMEWORKS

The usual framework for presenting information is the stress-vulnerability framework. This involves explaining psychosis as an underlying vulnerability (e.g., genetic predisposition) in combination with exposure to stressors that may predispose, trigger, or serve to maintain symptoms (222) (212). Within this context, one can present both biological strategies and psychosocial strategies to reduce the risk of psychosis and prevent relapse. Strategies include

- complying with medications
- avoiding substance use
- managing interpersonal conflict
- making use of peer support
- identifying and managing environmental stressors
- learning the “early warning signs” of onset and relapse
- developing and planning proactive coping and help-seeking strategies (225).

Analogies to the management of other ongoing health issues that fit this framework, such as diabetes, or asthma, can be drawn on as a way of normalizing the experience of mental illness, and as a way of promoting a sense of control.

Psychoeducation / continued

EDUCATIONAL FRAMEWORKS, continued

The process of recovery (i.e., diminution of symptoms, resumption of role functioning, and improvement in quality of life) is also an important organizing framework that can be utilized within both professionally based or peer-driven approaches (226) (227). By presenting recovery from a first episode as a process that is probable and occurs in recognizable stages, the individual and family are helped to normalize their own experiences, to see they are "not alone," and to realize that they are actively participating in the steps necessary to promote recovery.

Although most psychoeducational programs initially focus on providing information about the illness and move towards enhancing coping skills, there is no pre-ordained series of stages through which psychoeducation has to proceed. Clinicians must remain flexible and adjust the psychoeducational process according to individual patient and family needs.

EDUCATIONAL MATERIALS

Most self-help and patient-based literature is designed for people with established chronic illnesses. Therefore, many psychoeducational curriculum materials will be unsuitable for early psychosis. Efforts must be made to adapt existing material, or to draw upon the growing body of material that is tailored specifically to early psychosis (212) (58).

Several psychoeducational manuals for early psychosis populations are available and are listed in the section "Additional Early Psychosis Resources."

FORMATS AND SETTINGS FOR DELIVERING PSYCHOEDUCATION

An individualized approach to psychoeducation is best initially, because people differ in their explanatory models, emotional needs, and capacities to participate (222) (212) (228). Involving the family simultaneously in psychoeducation provides more opportunity for the family and patient to learn about the illness together, appreciate each other's perspective, and work out family issues (229).

Group approaches are frequently employed, since they make efficient use of therapist time, allow members to share experiences and foster social supports. Psychoeducation to groups of early psychosis patients and families should be considered as an adjunct to individual approaches.

Peer education and learning about others who have recovered – through personal contact or media such as stories or videotapes – can be a powerful source of hope and motivation for both patient and family members (87).

Some studies have found that psychoeducation is more effective when performed in the home while others have found no difference in effectiveness between home and outpatient settings (79) (218). It may be more beneficial to hold psychoeducation in the home, as this can be more comfortable and because learning occurs best in the context where the knowledge is to be applied. The decision of where meetings will occur should consider patient and family preference. Some people are initially hesitant to attend a mental health clinic for fear of stigma and of the unknown. Other people may be reluctant to allow a mental health professional into their home due to feelings of invasion of privacy.

Stress management

STRESS AND PSYCHOSIS

It is well established that the course of psychosis is related to stress (e.g., (230) (231)). Higher levels of stressful life events have been associated with more severe symptoms in both schizophrenia and bipolar disorder (231) (232). In addition to external stressors like negative life events, people with psychosis have identified internal stressors such as cognitive confusion, altered perceptions, attention deficits, and impaired identity or sense of self (233). These cognitive deficits along with high arousal levels can make adaptation to challenging situations extremely difficult (230).

GENERAL STRESS MANAGEMENT

Stress management enhances the individual's ability to cope with life events and daily hassles. For a person with psychosis, stress management also includes coping with the illness itself and its associated consequences. Stress may be conceptualized as made up of several components. First, there are events that may cause distress (stressors). Second, a person's perception of a situation may increase stress by mistakenly oversubscribing to the threat inherent to the situation. Third, once a person sees a situation as threatening (however unrealistic the appraisal may be), physiological arousal and behavioural responses will occur. Therefore, stress management can target situations or events, the person's view of events or the subsequent physiological and behavioural responses.

Coping is an essential element in an individual's ability to adapt to adverse challenges. Coping strategies can be divided into two categories:

1/ Emotion-focused coping attempts to alter the arousal and emotional consequences of perceived stressors. Methods include relaxation, exercise, breathing techniques, and other forms of arousal control. Cognitive techniques that change perceptions of events may range from simple distraction to re-evaluation of the likelihood of an adverse event and/or consequence. Emotion-focused coping is frequently employed when a stressor is unchangeable.

2/ Problem-focused coping attempts to ameliorate the stressors themselves. Strategies may involve examining and rectifying situations in daily life, learning how to appraise internal states, and accessing available resources. Problem solving also involves selecting the most appropriate coping strategy, using it, and then evaluating the results over time. Problem solving is an effective method for managing many stressors.

The more often early psychosis patients used problem-focused versus emotion-focused coping strategies, the more likely they felt able to deal with their stressors. In turn, these were associated with fewer symptoms and increases in self-efficacy and perceived social support. (234) (235). Despite the effectiveness of problem-focused coping, people with schizophrenia tend to use emotion-focused coping (234). This may be related to the cognitive impairments associated with psychosis – persons with cognitive impairment may rely on emotion-focused coping even when the stressor is changeable (230).

Teaching problem-solving skills provides individuals with a broader range of coping strategies. Targeting emotion-related information processing may also be effective and has been associated with fewer relapses and enhanced social integration (236).

Clinicians are advised to assess patients' current and past coping styles. No single coping strategy is always effective for all individuals, problems, or situations. Discussions with the patient about the successes and limitations of their coping efforts in particular situations can prompt the initiation of a variety of strategies. Planning for the use of specific strategies in well-defined situations should be coupled with evaluation of their success and subsequent revision.

Stress management / continued

PSYCHOSIS-SPECIFIC COPING

A variety of coping strategies for psychotic symptoms have been suggested but long-term efficacy and generalizability of these strategies have yet to be demonstrated. Techniques to reduce persistent auditory hallucinations include holding the mouth wide open (237), quietly humming a single note (238), wearing an ear-plug in the dominant ear (239), and using cognitive therapy strategies (240). Better adaptation to the presence of psychotic symptoms has been associated with the use of strategies that are simultaneously engaging and relaxing (241).

Patient reports of some tips for coping include: creation of structure and predictability, reduction of caffeine, anticipation in a variety of activities, conversational practice, social skills improvement, learning to monitor internal tensions and recognize the warning signs of a potential relapse, avoiding and/or preparing for stressful situations, change of stress-inducing attitudes, and acceptance of the psychotic illness (233) (242).

Relapse prevention

The majority of individuals who recover from a first episode of schizophrenia or schizoaffective disorder will experience a relapse within five years (197). Similarly, about 73% of bipolar patients maintained on lithium relapse within five years (243). Patients experiencing a first relapse have high rates of second and third relapses. Subsequent relapses are associated with more social impairment, higher levels of secondary morbidity (e.g., depression, anxiety, substance abuse), and more residual symptomatology (244) (245).

Maintenance medication, case management, psychoeducation, and family involvement are all associated with lower relapse rates. However, even when the full range of treatments is provided, relapse still remains a real possibility. Therefore, additional efforts are necessary in order to predict and thwart an impending relapse. If relapse does occur, this should be seen as a significant educational opportunity, both for the person and the family. A relapse should prompt re-evaluation of the person's knowledge of the illness and refinement of preventive strategies (stress management, help-seeking strategies, etc.).

PREDICTING RELAPSE

The chances of a relapse after recovery from a first episode are increased if the person is not taking antipsychotic medications and if he or she had poor premorbid adjustment (197). Stressful life events appear to increase the risk of relapse in the early phases of illness, but are less strongly associated with relapse after multiple episodes (246).

Both retrospective (247) (248) and prospective (249) (250) studies have demonstrated the occurrence of subtle psychological changes prior to a psychotic relapse. The most common changes include both nonspecific symptoms (e.g., change in sleep, anxiety, difficulties concentrating, depression) and attenuated psychotic symptoms (e.g., brief or poorly formed hallucinations, suspiciousness, mental confusion) (251). When the person is off medications, sleep disturbances may be more prominent. The progression from these early warning signs to the onset of psychotic relapse is fairly rapid, most often occurring over a period of less than a month (250) (247). In both schizophrenia and affective disorders the family and patient are usually aware of these early changes (252) (248).

Relapse prevention / continued

PREDICTING RELAPSE, continued

These changes seen prior to the re-emergence of psychosis have been referred to as both the "relapse prodrome" (253) and "early warning signs" (254). Although the combination of non-specific and psychotic-like symptoms predicts relapse better than vague symptoms alone, neither approach is particularly accurate (254) (253).

EARLY WARNING SIGNS

The concept of "relapse signature" posits that individuals have their own unique profile of signs and symptoms prior to relapse. This concept of uniqueness has been questioned, since it has been demonstrated that the symptoms shown prior to relapse often change for a given individual for each relapse (253). Regardless of whether the warning signs are variable or form a consistent pattern, an action plan for the patient and family should be developed for use when they believe a relapse may be starting. This action plan should outline the steps to contact appropriate service providers and initiate stress management and/or medication strategies. In bipolar patients, a program that taught recognition of early symptoms of relapse and immediate treatment seeking was associated with a significant increase in time to first manic relapse and better social and employment outcomes (255). For schizophrenia, approximately half of all relapses can be predicted through the detection of early warning signs (256).

TREATMENT ADHERENCE

Relapse prevention should include maintenance medication, case management, ongoing psychoeducation and family involvement, and frequent monitoring for early warning signs of relapse. In particular, maintenance medication is associated with a significantly lowered relapse rate.

Non-adherence to oral medication regimes in individuals with schizophrenia has been reported to be between 40% and 60% (257) (258). Similar numbers have been reported in euthymic bipolar patients (259). Within nine months of onset of a first episode of mania only 30% of patients were found to be consistently taking their medication (260). Lack of insight, negative beliefs about the effects of medications, stigma, and side effects are major contributors to non-adherence. Lower occupational status, alcohol abuse, and delusional intensity at baseline also predicted lack of adherence over two years (258). Use of the lowest possible dose of medication improves adherence by minimizing side effects (see the information provided under Increasing Doses, earlier in this section on Treatment).

Psychoeducation should present a rationale for treatment during the early weeks and months. Later, the benefits and drawbacks of adherence need to be explored with the patient. This discussion should be grounded in a thorough understanding of the person's attitudes towards treatment, as these will affect adherence. This exploration can take place in an unstructured or structured way, using active listening, and/or using the techniques of motivational interviewing.

Relapse prevention / continued

TREATMENT ADHERENCE, continued

Treatment Adherence Issues (261) (262) (263)

Common issues	Strategies for addressing them
Fears about dependence	■ Frame treatment as a mutual exploration process where the person plays an active role.
Fears about lifelong illness	■ Inspire hope for recovery (e.g., by connecting the person with recovered role models). ■ Avoid premature "sentencing" of person to lifelong treatment and discuss possible plans and timeframe for eventual cessation.
Stigma about taking medication	■ Address stigma and misconceptions about the illness and treatment.
Medication side effects or fears about side effects	■ Give information needed to recognize side effects. ■ Use the lowest effective dose. ■ Be open to negotiating treatment that minimizes side effects.
Perception that the medication does not work	■ Help the person see the relationship between improvements and medication. ■ Monitor whether medication does in fact work. ■ Address the possibility of relapse and the importance of avoiding relapse or minimizing its duration.
"Feeling better"	■ Help the person anticipate this feeling and see the need to maintain treatment.
Desire to "get a life"	■ Help the person see the connection between treatment adherence and achievement of valued life goals.
Complexity of treatment taking	■ Minimize polypharmacy. ■ Use behavioural strategies, reminders, and environmental cues (e.g., keeping medication next to the bed, using weekly pill boxes) to help the individual remember to take the medication.
Missing the euphoric mood	■ Remind the person of the deleterious consequences of the behaviours that accompany the elated mood. ■ Explore safer activities that promote mood elevation.

Relapse prevention / continued

TREATMENT ADHERENCE, continued

The strategies most likely to produce improvements in treatment adherence include both information and behavioural elements. That is, interventions need to feature aspects such as helping the person schedule medication-taking at regular, predictable times that are interwoven within the individual's daily routine, building in reminders (such as calendars or alarms), and enlisting the support of others.

Compliance therapy is an additional strategy that has been shown to enhance treatment adherence, improve insight, and decrease the risk of re-hospitalization (264). Efficacy in early psychosis still needs to be tested. This therapy is based on the strategies used in motivational interviewing and cognitive behavioural therapies. It is a brief therapy (four to six sessions) designed for acutely psychotic inpatients. The emphasis of the therapy is on exploring the patient's ambivalence about drug treatment, desire to stay well, and role in effecting his or her own outcomes. Again, analogies with other illnesses such as diabetes or asthma may be helpful.

Cognitive therapy

FOCUS OF COGNITIVE THERAPY

Cognitive therapy involves altering dysfunctional patterns of thinking that are linked to pathological feelings and behaviour. Cognitive therapy is sometimes confused with cognitive remediation, which aims to improve specific cognitive deficits (e.g., memory and attention impairments) through cognitive retraining. Multiple forms of cognitive therapy for psychosis differ somewhat in focus and technique (for review (265)).

The process of cognitive therapy consists of:

- developing a collaborative working relationship between therapist and patient
- challenging distressing thinking patterns and beliefs
- empirically testing beliefs and developing more adaptive and rational ways of thinking.

For individuals with psychotic disorders, cognitive therapy can be used for both

- increasing control over and coping with persistent psychotic symptoms (hallucinations, delusions, negative symptoms)
- treating secondary morbidity (depression, anxiety, adjustment issues, etc.).

Cognitive therapy for psychosis recognizes that biological factors have a central role in etiology but that psychological factors contribute to the expression and the experience of the psychosis. Throughout therapy, the continuum of psychotic symptoms with normal experience is emphasized (265).

Cognitive therapy / continued

COGNITIVE THERAPY FOR PSYCHOSIS

All studies done to date have looked at the effects of cognitive therapy in medicated patients. Cognitive therapy is considered an adjunct to antipsychotic medication, not a substitute. It has been used with patients having both early (266) (267) and longstanding psychoses (268) (269). Cognitive therapy has been effectively utilized during the acute phases to improve engagement with services and promote early adjustment (270) (271). Studies that included a large proportion of early psychosis patients have reported effects similar to those seen with chronic patients (266) (267) (272) (271).

Some improvements associated with cognitive therapy are substantial. Four controlled trials produced an average reduction in relapse of over 50% (273). Over and above the changes due to standard care and/or supportive counselling, cognitive therapy can result in significant reductions in the frequency of positive psychotic symptoms and improvements in general psychiatric functioning (for review see (273) (265)). Additional benefits may include decreases in preoccupation and distress due to delusions (265) (271), abbreviated length of hospital stay (274), increased insight (271), better control over the illness (266), and improved mood (271).

The use of cognitive therapy in persons with bipolar disorder is being developed (275). As in other studies of cognitive therapy in psychosis, significant reductions in symptoms and relapse rates have been reported (276). A particularly relevant dimension of therapy in bipolar disorder is the close attention paid to maintenance of routines and circadian rhythms (224) (275).

Cognitive therapy drop-out rates are similar to those for standard care (273). High rates of patient satisfaction with both individual and group approaches have been reported (277) (278). Generally, at follow-up periods of one year or less most improvements with cognitive therapy continue to be superior to those seen with routine care, although the superiority of cognitive therapy over non-specific supportive therapy at follow-up is not as clear (279) (269) (280) (281). Longer-term effects and the impact of "booster sessions" need further study (268) (270).

OBSTACLES TO OBTAINING COGNITIVE THERAPY

Cognitive therapy is a highly specialized form of therapy that is practiced by a relatively small number of practitioners. Even fewer practitioners trained in cognitive therapy are experienced with its application to psychotic disorders. It is not known how effective cognitive therapy would be when practiced by clinicians with less training or experience than therapists used in research studies.

PREDICTORS OF SUCCESS

Many studies have excluded patients from trials of cognitive therapy due to intellectual deficits, severe cognitive deficits, drug or alcohol abuse, or difficulties in communicating. Therefore, the generalizability of research findings is somewhat limited. There is evidence to suggest that a patient's ability to consider hypothetical alternative explanations to delusional beliefs, paranoia, and more illness insight may predict better outcomes (280) (279). A certain degree of symptom awareness and a willingness to disclose symptoms are necessary prerequisites.

A number of controlled trials have shown that cognitive therapy benefits patients with medication-resistant symptoms, who have at least a bit of insight into the source of their symptoms. Cognitive therapy should be offered by clinicians with demonstrated competence and should be a considered a useful adjunct to traditional treatment.

Skills development

PROBLEM SOLVING SKILLS

Deficits in problem-solving are common in early psychosis (282) (283) (284). Training in structured problem solving has been associated with improvements in functioning, especially when provided to both client and family (83). It has also been suggested that problem-solving training may modify the course of psychotic illness (285).

Structured problem-solving involves six steps (286):

1/ Identify the problem clearly (and break it down into smaller components if necessary).
2/ Brainstorm (list all possible solutions).
3/ Evaluate possible solutions (list advantages and disadvantages of each).
4/ Select one solution (the one that is more favourable when advantages and disadvantages were compared and the one that the individual has the resources to carry out – time, money, skills, etc.).
5/ Develop a plan to carry out the solution (break the plan into small concrete steps, set timelines for completion of steps, think ahead about likely difficulties and how they can be dealt with).
6/ Carry out the plan and review progress (evaluate the progress at each step, revise the plan as necessary, continue until the problem is solved).

Problem-solving is a technique that is used in conjunction with a number of different interventions, including stress management, relapse prevention, cognitive therapy, and social skills training.

SOCIAL SKILLS

Individuals with early psychosis generally have small social networks and relatively few friends (287) – a fact which may be related to deficits in social skills (288). Deficits in social functioning and interpersonal problem-solving skills are present early in the course of psychosis (282). Given that non-familial social support is associated with more positive outcomes in first-episode schizophrenia (289), efforts to improve social skills and functioning early in the course of psychosis are justified.

Social skills training attempts to develop (or retrain) interpersonal skills and competencies. Interventions are based on learning theory principles, with the goal being to improve social functioning in a variety of areas (work/school, relationships, daily living). The targeted behaviours may be relatively simple motor responses (e.g., eye contact) or more complex behaviours (e.g., assertiveness, communication).

Specific interventions have been well described in the literature (see (290) for a detailed guide) and include education, modelling, role-play or behavioural rehearsal, coaching, feedback, and positive reinforcement.

Skills development / continued

SOCIAL SKILLS, continued

Basic Skills Model –

The basic skills training model involves the training of specific social behaviours. More complex behaviours are broken down into discrete behavioural components, making them more amenable for training. Through a combination of modelling and role-playing, the client learns the individual components and then combines them in the appropriate sequence. The behaviours are then practised in the client's natural environment.

Skills training does result in acquiring the targeted social skills, as demonstrated through role-playing and naturalistic observation (291). Additionally, these skills are generally maintained over a period of months to one year (292) (293) but appear to deteriorate over longer periods of time (244).

Simpler types of skills (e.g., motor performance skills such as eye contact) may generalize across situations more readily than more complex behaviours (294). The evidence for generalizability of more complex behaviours in naturalistic settings without prompts is generally poor (295) and tends not to lead to improvements in social adjustment (293). This has led to the suggestion that incorporation of problem-solving techniques in social skills training is necessary.

Social Problem-Solving Skills Model –

The social problem-solving skills model involves training clients to correct problems in the manner in which they receive, process, and convey information in social situations. Clients are taught to generalize these skills to apply to novel problems they might encounter. The social problem-solving model tends to target deficits within specific domains (e.g., conversation, self-care, recreation). Protocols for skills training across a number of domains have been developed (296).

The social problem-solving model reliably enhances skills (297) (298). Additionally, there is evidence to support generalization of skills. This model has been associated with improvements in overall social adjustment (299), independent living skills (300) and illness self-management (297).

Most of the research on social skills training has been with clients who have longstanding psychotic illnesses and significant social skills deficits. The applicability of these techniques to individuals with early psychosis and/or clients with higher levels of social functioning remains to be tested. Nevertheless, problems with social skills are frequently present around the onset of psychosis, and treatment is appropriate. Skills training should incorporate problem-solving, as this appears to result in greater benefits and generalizability.

Skills development / continued

COGNITIVE SKILLS

Cognitive functioning is frequently impaired in psychotic disorders and may precede the development of positive symptoms. Specifically, a large, generalized deficit is often present along with more specific impairment in executive function, memory, and attention (32) (283) (284). These cognitive deficits appear to be related to interpersonal problem-solving and social functioning (301) (39), activities of daily living, and vocational functioning (302) (71).

Cognitive rehabilitation aims to help patients function better either by directly remediating cognitive deficits or by providing strategies to help compensate for compromised cognitive abilities.

1/ Remediation attempts to improve cognitive functioning by strengthening existing functions and substituting new skills for lost functions. Interventions include verbalizing and/or modifying task instructions, use of positive reinforcement, and repeated practice. The client engages in cognitive exercises, including computer-assisted strategies, in an attempt to improve specific aspects of cognition such as attention, memory, and executive skills.

2/ Adaptation attempts to adapt to the cognitive deficit using environmental aids and other strategies. Interventions include the use of visual prompts or memory aids, printed schedules, and memory books. These strategies do not attempt to rectify cognitive deficits but to alter the environment in a manner that makes them easier to manage.

Neuropsychological assessment guides the efforts at rehabilitation by identifying cognitive strengths and weaknesses.

Cognitive remediation in schizophrenia has been associated with enhanced performance on neuropsychological tests in a number of studies (303) (304) (305). However, a recent review located only three randomized controlled studies and concluded that there was no evidence of improved cognitive functioning (306). Additionally, there is little evidence that cognitive remediation can lead to improvements in social functioning. When cognitive remediation was provided prior to social skills training there were fewer benefits than when the training was provided in the opposite order (social skills training and then cognitive remediation) (307). A randomized controlled trial of daily one-hour sessions of cognitive remediation of executive functioning deficits (i.e., cognitive flexibility, working memory, and planning) resulted in improvements in cognitive ability and self-esteem, but did not result in any direct improvements in social functioning (304).

It has been argued that until there is more evidence supporting the efficacy of cognitive remediation, adaptive or compensatory strategies should be used as the primary rehabilitation strategy for people with serious mental illness (308) (309). The use of adaptive strategies has been found to improve global functioning as well as reduce symptomatology and relapse rates (310) (71). Nevertheless, a number of groups are pursuing cognitive remediation techniques in the context of training in activities such as social perception and interpersonal behaviour (e.g. (42)).

Skills development / continued

FAMILY COMMUNICATION TRAINING

Deficits in communication skills (e.g., difficulties facilitating interactions, tendency to acquiesce) are amenable to social skills training (see the previous section on Social Skills). This section discusses the use of communication retraining designed to decrease expressed emotion between family members and client. Expressed emotion is a term used to describe a pattern of communication that involves hostility, emotional over-involvement, and critical comments.

It has been consistently demonstrated that patients with chronic schizophrenia and major depression living with families rated high in expressed emotion are more likely to experience relapse (311) (312). Family work that reduces expressed emotion (such as communications retraining) reduces relapse rates (313).

There is, however, little evidence to suggest that expressed emotion is predictive of relapse in patients with early psychosis (314) (315) (316) (317) (318) or that family work designed to decrease expressed emotion is effective at reducing relapse in that group (319) (320). A transactional model has been proposed in which expressed emotion develops over time in families that have difficulties adjusting to the psychotic illness (321). This suggests that key interventions during the early phases of the psychotic illness would be constructive problem solving, development of better coping mechanisms, and increasing social networks, as opposed to strategies specific to lowering expressed emotion (210).

Promoting community functioning

COMMUNITY REINTEGRATION

One of the goals of early intervention is to return people to their normal environments as soon as possible. Readiness for reintegration depends upon whether the recovery process is relatively quick or prolonged. With early intervention, recovery from symptoms frequently occurs within days or weeks, and thus the person may be able to resume previous community activities quickly. Despite the laudable goals of quick reintegration, interviews with patients suggest that many people try to resume normal community activities too quickly (87). In retrospect, patients reported that a period of convalescence of several months would have been more appropriate.

Reintegration and stage of the illness

Rehabilitation attempts to synchronize reintegration efforts and the stage of the illness. After positive symptoms have resolved and negative symptoms are starting to abate, initial attempts can be made to facilitate social integration and return the patient to some meaningful activities. These initial reintegration efforts may not begin until a few months have elapsed, while sustained efforts at reintegration might not occur for months or even within the first year.

The concept of rehabilitation readiness refers to a stage that comes after basic needs (e.g., stabilization, housing, income) have been taken care of and psychosocial strengths begin to rebuild (self-esteem, ability to relate socially, etc.). The length of time until readiness will depend on the duration of untreated psychosis, the extent that community roles have been disrupted, and on psychological factors, such as the individual's confidence. Poor premorbid function, negative symptoms and cognitive dysfunction are significantly associated with unemployment in schizophrenia (302).

Promoting community functioning / continued

COMMUNITY REINTEGRATION, continued

Reintegration and stage of the illness, continued

The case manager should facilitate return to social functioning, provide psychoeducation, and utilize psychosocial rehabilitation techniques. Rehabilitation methods include helping the person explore interests, strengths, and values in relation to work and school before setting social and vocational goals. If rehabilitation skills are not part of the case manager's repertoire, a referral should be made to a specialized service.

After discussion with the patient and family, the case manager may make contact with guidance counsellors, human resource personnel, teachers, or employers. The case manager can help the patient disclose the nature of the disability, negotiate accommodations and support within the setting (e.g., modifications to the curricula, study aids, time accommodations), and monitor his or her ability to manage the stresses of the situation. The ultimate goal is to help the individual negotiate his or her support needs on an independent basis.

Job retraining or alternate schooling

Individualized training plans and/or alternate schooling should be considered if necessary. Unfortunately, schooling methodology appropriate for students experiencing early psychosis is in its infancy. When broaching the topic of job retraining, care must be taken not to communicate the message that the key worker is giving up on the person's previous goals, or that the worker holds low expectations about the person. Lowering expectations must be communicated as something that will enable the individual to achieve success and to explore personal interests.

Cognitive functioning is a better predictor than psychiatric symptoms of success in rehabilitation programs and community functioning (18). Cognitive assessment can provide important information on a patient's profile of strengths and weaknesses. The ability to determine a person's learning potential through neuropsychological testing is an exciting area that has implications both for placing persons in suitable programs and for customizing learning and performance situations. Occupational therapy is very useful in evaluating functional abilities, undertaking analyses of the requisite skills need to perform a task, and then assisting a person to perform the task – either through direct training or modification of the task to suit the persons abilities.

Role of peer support in reintegration

Peer-based education and support groups provide an opportunity for people to practice social skills and achieve a sense of belonging and social support (60). In general, when people in early psychosis meet or learn about people who have "been where they've been, and gotten to where they want to be," this offers a powerful source of inspiration, as well as a rich source of knowledge about how to achieve their own goals (87).

Promoting community functioning / continued

HOUSING AND FINANCES

Housing placement

Poor housing can act as a precipitant for psychosis, and a person's mental state can improve upon placement in a safe, clean, and calm environment. Many hospitalizations could be avoided if adequate housing were available. The use of small therapeutic houses populated with people of about the same age and at the same stage of recovery appears promising (322). These settings might help to reduce length of hospitalization (especially when housing is an issue) and facilitate group recovery and reintegration.

All patients should be asked about their current living arrangements, finances, and housing. Although most early psychosis patients live with their parents, many do not or will cease to do so. It is essential that safe and affordable housing be available to patients whose current living environment is detrimental to their mental or physical well-being. If a person needs housing, the type of placement should be determined after an assessment of

- the individual's level of functioning (e.g., ability to perform activities of daily living, routine, independence, social interactions,)
- risk behaviour (e.g., medication adherence, suicide risk, drug/alcohol use, self-organization)
- family needs and concerns (e.g., care giving, safety concerns, functioning, availability)
- goals of the patient (e.g., promotion of independence, learning of life skills, socialization)
- financial resources.

When shared accommodations are considered, efforts should be made to place the patient with others who are of approximately the same age and level of functioning.

Application for disabled status

In British Columbia, the minimum age requirement for application for disability benefits is 18 years old. Application can be made when

- the patient is encountered by service providers (e.g., hospital staff, GP, community mental health workers)
- there is a decline in functioning
- there is diagnosis of a condition likely to persist for at least one year
- demonstrated need for treatment (medications, rehabilitation, daily living support, housing, etc.).

Promoting community functioning / continued

HOUSING AND FINANCES, continued

Application for disabled status, continued

The positive and negative aspects to receiving disability benefits should be discussed with the patient prior to making the application.

Positive aspects include the following:

- ability to go off disability and subsequently request disability benefits without having to reapply
- greater ability to hold saved assets compared to regular income assistance
- coverage of certain expenses including medications, dietary allowance and/or bus passes
- greater monthly benefits compared with regular income assistance
- retention of the ability to do some part-time work without penalty.

Negative aspects include:

- stigma associated with having to apply and identify oneself as having a "disability"
- frustrations of dealing with the income assistance system
- fear of becoming dependent on "the system"
- disability benefits often not sufficient for daily living expenses (i.e. patients usually still need to maintain tight budgets).

Once the decision is made to apply for disability benefits, the earlier the application is sent, the better for the patient.

Section V

SPECIAL POPULATIONS

"At Risk" – Prodromal states

The prodrome is a period of disturbance that represents a deviation from a person's previous experience and behaviour prior to the development of florid features of psychosis (323) (324). The term prodrome has been used both to describe the period prior to the first episode of psychosis (initial prodrome) and the period prior to relapse of psychosis (relapse prodrome).

continued . . .

"At Risk" – Prodromal states / continued

This guide uses the term prodrome to describe the period of non-specific symptoms and disruption before the individual became psychotic for the first time. The prodrome is diagnosed retrospectively (i.e., is identified only after the development of florid features of psychosis). Retrospective assessment for the presence of a prodrome carries implications for diagnosis and treatment.

Other terms that have been used to describe the disturbances that may precede onset include "at-risk mental state" (325) and "precursor syndrome" (326). When an individual has experienced a decline but is not yet psychotic, it is preferable to describe this as an "at-risk mental state" rather than a prodrome. The pre-relapse period is better referred to as "early warning signs of relapse" or "signs and symptoms of impending relapse."

FEATURES OF THE PRODROME

Prodromes occur prior to the development of numerous psychotic disorders including schizophrenia and bipolar disorder. The average prodrome lasts 12 to 24 months (327). However, it may range in length from days to decades, with a median of about one year for schizophrenia (324) (323) (328).

DSM-III-R described the schizophrenia prodrome with nine features that encompassed behavioural, affective, perceptual, thinking, and deficit features. However, raters failed to consistently agree on the presence of specific symptoms, their instability over time, and the inability of the symptoms to reliably precede the onset of schizophrenia (329) (330) (331) (332). DSM-IV (333) now simply refers to the prodrome as consisting of negative symptoms and/or attenuated psychotic symptoms.

The most frequent prominent prodromal symptoms include social isolation or withdrawal, marked impairment in role functioning, odd or bizarre ideation, decreased drive and energy, and blunting of affect. Other frequent symptoms are:

- school difficulties
- somatic complaints
- perceptual abnormalities
- changes in sense of the self, others or the world
- fatigue
- sleep disturbance
- suspiciousness
- anxiety
- irritability
- depression
- aggression
- speech abnormalities
- concentration and memory problems (324) (334).

"At Risk" – Prodromal states / continued

DIAGNOSTIC IMPLICATIONS OF ASSESSING FOR A PRODROME

It is important to establish whether a prodrome was present before onset of psychosis, since diagnostic clarity may depend upon its presence. For example, differentiation of schizophrenia from schizophreniform or other psychoses depends upon a longitudinal assessment of changes in the patient. The presence of a prodrome may also help clarify the role of substance abuse in the etiology of the psychosis. Sometimes, an error is made by attributing the psychosis to recent substance use, and a history of years of prodromal symptoms and functional impairment may be ignored or not elicited.

PREDICTIVE VALIDITY OF PRODROMAL-LIKE SYMPTOMS

Symptoms associated with the prodrome are common to other mental disorders and are frequently seen as part of normal developmental phases, responses to stress, and interpersonal problems. Strategies have been developed to better predict who will become psychotic in the near future. These strategies generally combine prodromal symptoms with other risk factors, such as a family history of psychosis, transient psychotic symptoms, or schizotypal personality traits (4) (335) (336). However, a substantial risk of falsely predicting psychosis still occurs when utilizing these strategies. Even using this more sophisticated approach to identifying individuals in an ultra at-risk state, about 40% actually made the transition to psychosis within six months (337).

APPROPRIATE INTERVENTIONS

It has been reported that it may be possible to prevent or reduce the severity of psychosis by intervening in the at-risk mental state (338). However, the risk of false positives is high, with many individuals falsely identified as being in the prodrome. These falsely identified individuals are then placed at risk for unnecessary treatment, unnecessary stress and turmoil, labelling, and stigma. Furthermore, the type(s) of effective treatment to be given along with their timing, intensity, and duration all remain unknown. These concerns have led some to recommend that interventions for those in possible prodromal states be symptomatic and problem-focused (45). Research projects currently underway should help determine whether interventions during an at-risk state may be beneficial in preventing onset or otherwise modifying the course of the psychotic disorder if it develops (338) (339) (337) (340).

The inability to accurately predict transition to psychosis and the lack of knowledge about the ability of interventions to prevent onset of psychosis or provide other benefits both preclude the use of psychosis-specific treatments until a psychosis is definitely present. In clinical practice, the prediction of psychosis or initiation of treatment for psychosis should not be made on the basis of symptoms interpreted as prodromal nor on the basis that there exist risk factors for psychosis. Individuals who appear to be at very high risk for psychosis (possible prodromal) should be engaged, treated for presenting complaints (i.e., depression, anxiety, insomnia), and closely monitored. Stressors that could exacerbate the condition should be ameliorated. Standard approaches include modification or avoidance of stressors, shifting perception of the stressor to render it less threatening, and decreasing attendant physiological arousal. Treatment specific for psychosis (e.g., provision of antipsychotic medications, education about psychosis) should be initiated only upon emergence of florid psychosis.

Substance abuse

EXTENT AND CONSEQUENCES OF SUBSTANCE ABUSE IN PSYCHOSIS

One-year and point-prevalence estimates of comorbidity in early psychosis range from approximately 20 to 30% (341) (342). The rates of comorbidity in first-episode affective versus nonaffective psychosis appear to be similar (343).

In early psychosis, cannabis and alcohol appear to be the two most frequently abused substances (342) (341). The prevalence of stimulant (amphetamines and cocaine) and hallucinogen abuse is also relatively high, while sedative and opiate use is less common (344) (341).

Risk factors for the development of comorbidity include male gender (341) (342) and anti-social behaviour (341). Substance abuse has been associated with an earlier age of onset of psychosis (341) (342) (345).

Although substance abuse does not appear to be related to the severity of psychopathology in the early phases of psychosis (346) (341), there is evidence that substance abuse in early psychosis is associated with impairments in functioning and lower quality of life (345). Longstanding psychotic illness coupled with comorbid substance abuse is associated with higher rates of negative outcomes (e.g., poor money management, homelessness, medication non-adherence, relapse and re-hospitalization, violence, legal problems and incarceration, depression and suicide, as well as sexually transmitted disease) (347).

EXPLANATIONS OF COMORBIDITY

The high prevalence of substance abuse in individuals with psychosis raises questions about the relationship between psychosis and substance use. Three causal relationships might explain comorbidity:

1/ substance abuse causes psychosis
2/ psychopathology and distress cause the substance abuse ("self-medication")
3/ a third variable accounts for the development of both (e.g., personality, environment, genetics).

It has been suggested that if the substance abuse started first, the drugs may have caused the psychosis. However, there does not appear to be a single pattern to the emergence of substance abuse in relation to the onset of psychosis. For first-episode schizophrenia, three temporal patterns were seen with approximately equal frequency – substance abuse predated the onset of psychosis, emerged at the same time as the psychosis, or developed after psychosis (344).

Literature reviews on the question of etiology have generally concluded that there is no solid evidence that clearly demonstrates the nature of the relationship between substance abuse and psychosis (for review see (348) (349)). The relationship between substance abuse and psychosis is likely multi-dimensional and dependent upon numerous mitigating factors.

Substance abuse / continued

MODELS OF SERVICE DELIVERY

The inherent difficulties in providing services to clients with psychosis and comorbid substance abuse are exacerbated by the separation of treatment programs for mental illness from those for substance abuse. The problems resulting from such a division of service is further compounded by the frequent exclusion of clients with substance abuse from entry into mental health programs and vice versa. Ultimately, few treatment options are left open to this population. This problem is not unique to British Columbia – many provinces and states in North America have services similarly divided. In the United States, a series of government-funded reviews identified that the separation of these services was associated with poor outcomes for people with mental illness and comorbid substance abuse (350). Three outpatient service delivery models have been used for treating comorbidity (for review see (351)):

1/ Sequential or serial: This model involves treating one disorder until it is under control, and then referring the client to another agency to treat the other comorbid disorder. Both agencies often prefer to be second in line.

2/ Parallel: In this model, two agencies work with the client at the same time, each treating one disorder.

3/ Integrated: This model incorporates substance abuse and mental health interventions in one clinical program.

The following problems are associated with the sequential and parallel models:

- lack of comprehensiveness in assessment and treatment
  - > Clinicians do not gain an understanding of how problems interact and maintain one another.
  - > These interactions and maintenance factors are not addressed in treatment.
- poor continuity of care
  - > Interventions can be incompatible with goals of other service (e.g., confrontative treatment for substance abuse).
  - > Engagement is threatened by requiring clients to attend two different services and have significantly more professionals involved in their care.
  - > There is often inadequate information exchange or little collaboration between treating professionals.
- most significantly, an association with poor client outcome (352) (350).

Integration of treatments may be necessary to address both the lack of effectiveness and the other problems apparent with these methods of service provision (351) (350) (353).

Substance abuse / continued

INTEGRATED TREATMENT

The National Institute of Mental Health funded thirteen community demonstration projects in the late 1980s to determine if integrated treatment was feasible and effective. The evaluation concluded that integrated services can successfully be developed in a number of different clinical settings and appear to improve client outcome (i.e., reductions in substance use and hospitalization rates) (354).

Integrated programs provide treatment for both substance abuse and mental illness by the same clinician or team of clinicians. This helps to ensure consistency of information and coherency of treatment framework. Integrated programs differ to some degree in the specific treatment components they offer. However, there are many common elements across current integrated treatment approaches (351) (355):

- comprehensive assessment
- group counselling
- individual counselling
- psychoeducation
- medication management
- stress management
- relapse prevention.

Additional components offered by some integrated programs include:

- psychosocial rehabilitation
- cognitive therapy
- specialized housing
- assertive outreach.

The emphasis of integrated treatment tends to be on (351) (355)

- long-term treatment vs. short-term fixes
  - > Time is allowed to foster engagement before active treatment.
  - > Motivating clients to alter current substance use is considered crucial and often constitutes a considerable portion of treatment.
  - > A gradual reduction of substance use is sought to allow for the setting of small goals and to foster self-efficacy.
  - > Time is needed for the client to learn how the psychosis and substance abuse interact.
  - > Ongoing strategies need to be provided to enhance recovery from both psychosis and substance abuse (e.g., enhancing coping skills or social skills)

Substance abuse / continued

INTEGRATED TREATMENT, continued

- harm reduction vs. abstinence
  - > Abstinence is unimaginable to many clients, and it is often exceptionally difficult motivating them towards this goal.
  - > The main goal is to reduce harm due to substance use.
  - > Changing consumption patterns is portrayed as a means to a different goal that is desirable to the client (e.g., "reducing your use will help you stay out of hospital, improve your relationship with your girlfriend, help with your financial problems, and allow you to rent a nicer apartment")
  - > Because of their emphasis on abstinence, attendance at groups such as Alcoholics Anonymous or Narcotics Anonymous is usually not recommended (unless desired by the client).
- motivational interventions vs. confrontational counselling
  - > Motivating clients to reduce current substance use is of primary importance.
  - > Confrontation is counter to the goals of engaging and motivating clients.
  - > Confrontational interactions may even exacerbate stress and psychotic symptoms.
  - > For a description of motivational interventions, refer to the information under the heading "Motivational Interventions" further on in this section.

EFFECTIVENESS OF TREATMENTS

Although a number of early psychosis programs have integrated substance abuse treatments (356), data documenting their effectiveness has yet to be reported.

Given the paucity of treatment outcome data specific to early psychosis, most conclusions must be based on research for comorbidity present in those with more longstanding psychotic disorders.

Outpatient Integrated Treatment

Several reviews concluded that integrated treatment confers superior benefits compared to other treatment models (351) (357). Studies comparing differing models of integrated treatment generally found that the addition of motivational and behavioural interventions could lead to better outcomes (358) (359).

However, a recent review of six randomized-controlled outpatient treatment approaches concluded that

1/ there is no convincing evidence that integrating substance misuse programs within psychiatric care produced better outcomes than standard psychiatric care

2/ there is insufficient evidence to conclude that any single approach to integrated treatment is superior (360).

The paucity of well-controlled effectiveness research is surprising, given the number of treatment programs that have developed in recent years. Fortunately, the publication of the recent review described above appears to have acted as a catalyst, stimulating better controlled research in this area.

Substance abuse / continued

EFFECTIVENESS OF TREATMENTS, continued

Outpatient Integrated Treatment, continued

Some of this more recent evidence has demonstrated that integrated treatment programs (361) (362)

- have lower attrition rates (50% lower than standard programs)
- decrease abuse severity
- decrease psychiatric symptoms.

"Dual-Diagnosis" Groups

To address the need of providing treatment for clients with comorbid psychosis and substance abuse, many mental health systems have incorporated "dual-diagnosis" groups to existing mental health services. These groups are usually led by professionals who are not part of the client's clinical team. Groups vary in structure and content covered but tend to address substance abuse through a combination of education, skills training, and support.

Adding a "dual-diagnosis"* group onto existing outpatient mental health services may be effective if clients attend regularly. However, the drop-out rate appears to be high, even when clients are motivated to reduce their substance use (363). Given the very high attrition rate, dual diagnosis group interventions appear to be insufficient for the majority of clients and may better be regarded as adjunctive (364).

**note: the term "dual-diagnosis" has multiple meanings including: 1) Axis I diagnosis plus Mental Retardation; 2) Axis I diagnosis plus Personality Disorder; 3) Axis I diagnosis plus Substance Abuse or Dependence. In this context, it is used to refer to an Axis I diagnosis of severe mental illness and substance abuse or dependence.*

Intensive integrated treatment

Intensive integrated treatment is usually provided on an inpatient basis or within residential programs. It consists of daily treatment for several hours per day for weeks or months. Interventions usually consist of education, skill building, individual and group counselling, and medication management (for review see (351)). Studies that have investigated the efficacy of intensive treatment of this nature often report high drop-out rates (365) (366). Those patients who do not drop out appear to have either little change in overall substance use or a high rate of return to their prior level of substance abuse (367) (365).

The poor outcomes associated with intensive integrated treatment may result because of

- clients' inability to tolerate such intensive interventions
- the fact that the clients' access to substances is only limited while they are in active treatment
- the artificial environment clients are in during active treatment – return to their normal environment exposes them to social pressures and environmental cues that trigger use and hence relapse.

Given the relative lack of effectiveness and the expense associated with intensive treatment programs, hospitalization and residential programs are probably best reserved for withdrawal and detoxification.

Substance abuse / continued

MOTIVATIONAL INTERVENTIONS

One of the core features of integrated treatment programs is the focus on motivational interventions. Lack of motivation for reducing substance abuse appears to be a significant obstacle to successful treatment. Based on motivational interviewing techniques (368), motivational interventions of substance abuse treatment for psychiatric patients have been developed (369) (370). Matching motivational interventions to stage of recovery is viewed as crucial to outcome (371) (351) (372).

Core principles of motivational interviewing (368) include:

- expressing empathy and avoiding confrontation to foster engagement
- supporting self-efficacy by focusing on successes
- developing a sense of the discrepancy between current and more attractive behaviours.

The motivational model consists of discrete stages of recovery that correspond well to the stages of treatment for psychosis. In integrated treatment, the substance abuse and psychosis interventions are usually blended together according to the stage of treatment.

Evidence is accumulating that the incorporation of motivational techniques produces better outcomes (362) (373).

ASSESSMENT

Clinicians frequently fail to adequately assess current substance use, consequences of use, and development of the problem (374). Essential elements of the assessment of both current and past use include:

- drugs used
- frequency and duration of use
- dose and method of administration
- availability, assurance of quality and financial cost
- positive and negative effects as triggers and consequences
- effect of use on psychiatric symptoms
- preferred times, situations, and other prompts for use
- attempts to quit (successful and unsuccessful)
- motivations for reducing and continuing use
- impact on functioning
- dangerous behaviour.

Behavioural analysis (assessing antecedents, substance-use behaviour, and consequences) may uncover variables that prompt drug use and that could then be modified or avoided. Stimulus control, skills training – especially drug refusal skills, adaptive behavioural alternatives and motivational interventions – may all be guided by the assessment.

Reassessment at regular intervals helps evaluate treatment progress. Outcome measures frequently used include frequency, quantity, high-risk use, and cravings. Relatively few instruments or rating scales have been validated for clients with comorbidity (for review see (375)).

Substance abuse / continued

SUBSTANCE-INDUCED PSYCHOSIS

Although there is no consensus on whether substance use can cause a longstanding psychotic illness (such as schizophrenia) (349), certain substances (e.g., amphetamines) certainly can induce a brief acute episode of psychosis (376).

Biochemical methods of detecting substances in the blood, breath, or urine may be most useful upon hospital admission to help determine whether psychotic symptoms might be substance-induced. Self-report regarding substance abuse tends to be less valid for inpatients than for outpatients and biochemical screens may identify substance use that otherwise would have gone undetected (377). Emergency treatment should involve detoxification, supportive measures, and brief use of benzodiazepines if indicated (376). An antipsychotic-free period during this period may help to clarify diagnosis.

In outpatient settings, the clinician may best be able to make a differential diagnosis by (375) (376):

- determining the temporal relationship between substance use and onset of psychosis
- noting if the symptoms are characteristic of substance intoxication/withdrawal (e.g., tactile hallucinations are characteristic of amphetamine intoxication; visual distortions are characteristic of LSD intoxication)
- observing for the persistence or remission of psychotic symptoms during periods of abstinence.

Development disabilities

DEVELOPMENTAL DISABILITY AND ITS RELATION TO PSYCHOSIS

Developmental disability is a term increasingly used to refer to individuals with mental retardation. Mental retardation is defined as an IQ of less than 70 with deficits in adaptive functioning and onset before age 18.

Although North American studies report the prevalence of schizophrenia in developmentally disabled individuals to be about the same as in the general population (378) (379), European estimates ranging from 1.3 - 6%, indicate a higher prevalence of schizophrenia (380). Onset of schizophrenia is rare before adolescence but tends to be somewhat earlier in patients with developmental disability than in the general population (381).

PRESENTATION OF PSYCHOSIS IN THOSE WITH DEVELOPMENTAL DISABILITY

In mild developmental disability, the clinical phenomena of psychosis are not particularly distinctive. Hallucinations are the most frequent symptom followed by persecutory delusions and formal thought disorder (381) (380). There is nothing unique or esoteric in the symptomatology (382), though delusions may be bland and unremarkable (383).

Because of verbal difficulties, most experts believe it is not possible to reliably diagnose psychosis in those with an IQ of less than 50 (379). If features such as grossly disorganized behaviour or negative symptoms develop and were absent in the premorbid period, a diagnosis of psychotic disorder not otherwise specified should be made.

Development disabilities / continued

ASSESSMENT CONSIDERATIONS

- Give greater weight to observable phenomena in low verbal patients. Examples of this might include reports that the person has had a change in behaviour that is sustained in different environments and appears bizarre. However, these observed phenomena are not reliable symptoms of psychosis. For example, the observation "seems to be hallucinating" could actually be indicative of posturing, abnormal interest in peripheral stimuli, delirium, or a learned behaviour.
- Avoid diagnostic overshadowing. This refers to the tendency to assume that aberrant behaviour is a manifestation of the developmental disability, rather than indicative of an accompanying disorder (378).
- Recognize phenomena that may be developmentally appropriate in younger children. Thinking out loud or imaginary friends should not be confused with psychotic symptoms in adults with developmental disability.
- Recognize that wish fulfillment and fantasy may lead to the appearance of false beliefs that are not always open to persuasion and argument. Generally these ideas tend to be ephemeral and are not held with intensity for any length of time (384).
- Minimize the tendency of developmentally disabled patients to utilize a response set that answers questions in the affirmative.
- Recognize that concentration problems necessitate frequent reiteration of questions and breaks during the interview.
- Corroborate information from a reliable informant. Where large discrepancy exists between patient and informant reports, informants are more likely to give clear accounts of worries, loss of interest, irritability, and social withdrawal. Patients are more likely to report hallucinations, delusions, and autonomic symptoms.

DIFFERENTIAL DIAGNOSIS

Schizophrenia is the most frequent psychotic disorder diagnosed in developmental disability (385) (381) (382). Brief reactive psychosis and mood disorders with psychotic features also occur (383). Psychotic disorder NOS is the recommended diagnostic category for patients with IQ < 50 and psychotic symptoms (379). Case reports suggest a very strong association between paranoid symptoms and impaired hearing or vision in this population.

Autism is more common in individuals with developmental disability and may present with flat or inappropriate affect, posturing, disorganized speech, alogia, and avolition. However, age of onset is much earlier than in schizophrenia. The risk of schizophrenia developing later in people with autistic disorder remains the same as in the general population. In diagnostically ambiguous circumstances, close monitoring, and use of standardized or visual analogue scales is recommended.

Development disabilities / continued

TREATMENT

For individuals with mild developmental disability, mental health team members with competence in psychotic disorders and knowledge of early intervention should be suitable clinicians. For individuals with IQ < 50, consultation, if not direct treatment, with a specialized mental health team is advised.

- Antipsychotic medications remain the first line treatment of psychosis.
  - > As for all patients with a psychotic disorder, a "start low, go slow" approach is recommended (379).
  - > The use of antipsychotics in this population is associated with greater risk of developing movement disorders (especially tardive dyskinesia and tardive akathisia) and cognitive impairment (386) (387).
  - > Current clinical practice is guided by evidence from trials of those with schizophrenia and IQ > 70 because of a lack of research on antipsychotics in persons with developmental disability and psychosis (388).
- Psychoeducation, especially to families and caregivers is of paramount importance.
  - > Adaptation of existing psychoeducational materials is needed and should include topics relevant to developmental disability and the consequences of this comorbidity.
- Although social skills training can help persons with developmental disability (389), no studies exist for patients with both developmental disability and psychosis (384).
- There is a need for specialized day treatment programs because many of these individuals are not able to cope with generic day programs for psychosis offered by community mental health teams.

Section VI

LEGAL AND ETHICAL ISSUES

The Mental Health Act

In this section, the important issues of involuntary commitment, confidentiality, and consent are examined in the context of the laws in place at the time of writing in British Columbia, Canada.

The *Mental Health Act* in British Columbia provides authority for the involuntary admission and treatment of people who, because of a mental disorder, are not able to be treated voluntarily.

continued . . .

COMMITTAL CRITERIA

Involuntary admission and treatment (committal) should be considered when a person needs psychiatric treatment but refuses it, and without treatment is likely to suffer significant harm. In the case of a child under 16 years of age the parent or guardian can admit the child as a "voluntary" patient if he or she suffers from a mental disorder and if the hospital physician agrees to the admission. However, involuntary admission is possible no matter what the age of the person.

To be involuntarily admitted the person must meet all the committal criteria:

- being a person with a mental disorder
- not suitable as a voluntary patient
- in need of psychiatric treatment
- in need of care supervision and control for their own or others' protection or to prevent the person's serious mental or physical deterioration.

There are three methods for effecting an involuntary admission:

1/ The preferred method is where a physician, who does not have to be a psychiatrist, examines the person and completes a Medical Certificate, certifying that the person meets the admission criteria outlined above. On the authority of that certificate, any person (though it is usually ambulance personnel) may apprehend and transport the person to a facility designated under the *Mental Health Act* (usually a hospital). There the person is admitted, if the admitting physician agrees. The individual can be held for up to 48 hours. He or she must be released or become a voluntary patient after 48 hours unless another physician has completed a second Medical Certificate that extends the involuntary stay for up to one month. The involuntary status can be continued following the completion of a renewal certificate.

2/ A police officer may apprehend a person with an apparent mental disorder if the person is also likely to endanger his or her own safety or the safety of others. The police officer takes the person to a physician, usually at a hospital emergency department, and the physician completes a Medical Certificate for the 48-hour admission.

3/ If a person will not see a physician or if police criteria do not apply, any person may apply to a provincial court judge, or in their absence a justice of the peace, to have the person admitted for an examination. The judge uses similar criteria to those used by a physician. A warrant authorizes the police to take the person for admission to a designated facility. The police may enforce a warrant issued by a judge or assist any person who is acting on a certificate (e.g., ambulance personnel, relative) to apprehend and transport the person to a designated facility.

TREATMENT CONSENT

Persons who are involuntarily admitted must be informed of their rights. These include the right to

- be told of the reason for the admission
- speak with a lawyer
- apply to the review panel for release
- apply to the court for release under habeas corpus or on the merits of the case
- nominate the person who will be informed of their admission and their rights
- have periodic reviews of their condition
- receive a second medical opinion on the appropriateness of the medical treatment.

Involuntary patients may consent to their own treatment if they are capable of so doing. If they are incapable or refuse to consent the treating physician recommends the treatment to the director of the psychiatric unit. The director may then consent.

LENGTH OF INVOLUNTARY ADMISSION

The first Medical Certificate provides authority for involuntary admission for up to 48 hours. The second certificate extends that from the date of admission for one month. The first renewal certificate extends the involuntary status for another month and the next renewal certificate for another three months. After that each renewal certificate is valid for six months.

AGE AND CONSENT TO TREATMENT

If the person is an involuntary patient and capable of consenting to treatment, there is no age limit. If he or she is not capable or refuses, the director of the facility makes the decision to treat. If a person is under 16 and has been admitted under the *Mental Health Act* as a voluntary patient by a parent or guardian, the parent or guardian usually makes the treatment decision, although the young person may do so, if capable. A minor who has been admitted by a parent or guardian under the *Hospital Act* makes the treatment decision if capable. Otherwise the parent or guardian does.

If a person of any age is admitted as an involuntary patient under the *Mental Health Act* a "near relative" must be informed of the admission and of the person's rights. The patient can nominate a friend instead of parents as a "near relative." The notice would then be sent to that person. If, however, the director is of the opinion that it would be in the patient's best interests to inform another near relative, that may be done.

Persons who are 16 or older may admit themselves voluntarily under the *Mental Health Act.* In this instance the hospital is not obliged to inform a near relative. If the person is a minor, capable, and admits himself or herself under the *Hospital Act,* there is no obligation to inform the parents.

PARENTAL ACCESS TO THEIR CHILD'S MENTAL HEALTH FILES

When a child is admitted to care under the *Mental Health Act* or *Hospital Act*, the parents or guardians only have free access to the child's mental health files if he or she is not capable of giving permission to access the file. If the child is an involuntary patient of any age under the *Mental Health Act,* the child has access to the file, if capable. The parent only has access if the child is not capable. The hospital can provide the parent with information under the *Freedom of Information and Protection of Privacy Act* (FIPPA), if it considered to be necessary for the continued treatment of the child and was collected for that purpose.

ACCESS TO INFORMATION IN AN INDIVIDUAL'S FILE

The person with authority to access the file (i.e., a capable person or the parent of an incapable minor) has authority to grant anyone else (e.g., school counselors) access to the file. No one else, except health professionals involved in the care of the individual, has direct access to the files.

If it is another health professional seeking access to the file, permission of the patient is not ordinarily required, although it should be gained if practicable. If it is a family member or another person involved in the care, again permission of the patient would ordinarily be sought. If this is not practicable, and the conditions of the FIPPA apply, then the information can be released. The file must have names of third parties or information about them stricken to protect their privacy. In most situations involving non-professionals, it is probably better to convey file information verbally rather than giving copies of the file.

INFORMATION VOLUNTEERED BY A THIRD PARTY

FIPPA states that before someone can provide the therapist in a "public body" (e.g., in a hospital, but not a private office) with information about the patient, the therapist must obtain the patient's permission. Where that is practicable it should be done.

DURATION OF FILE STORAGE

If the clinician is working with an organization, that body will have retention rules. In a private office it is generally expected that files will be kept for seven years, but they may be kept longer.

CLINICAL PROCEDURES WHERE ABUSE IS SUSPECTED

If a person receiving care is younger than 19 and abuse of any kind is suspected, the therapist has an obligation under the Child, Family and Community Service Act to report it to the nearest Ministry of Children and Families office. If the person is an adult, a report can be made to the health authority. Regarding suspected crimes, if a crime is imminent or in progress, the police should be called directly. Otherwise the head of the public body should approve first.

Section VII

MEASURING EFFECTIVENESS OF CARE

The field of early psychosis is filled with unanswered questions pertaining to risk, mechanisms of psychosis, assessment, treatment, service systems, and outcome. Although many clinicians believe that doing research is alien to their daily work, this is not true. Research can be experimental, quasi-experimental, or uncontrolled, yet all can be extremely useful. Clinicians can provide valuable contributions when they keep good records and judiciously employ standardized and non-standardized measures. Such data can be used for local research projects and for external research in a variety of ways. Of the many types of data that can be collected, intake and outcome assessment is particularly relevant to daily practitioners.

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SECTION VII MEASURING EFFECTIVENESS OF CARE

Intake assessment is obviously important to formulate problems, plan interventions, and administer systems of care. Outcome measurement is useful for clinical, administrative, and research purposes. The study of outcomes complements the measurement of structural features (organizational design, staffing attributes, facility properties) and care processes (the services rendered to a patient) (390). Thus, measurement has come to take on greater importance as a tool to

- allocate resources
- improve accountability
- assess the fidelity of services to their purported models of care
- assess the effectiveness of intervention efforts.

The development of indicators should include measures of outcome as well as those related to process and implementation. These indicators should be reviewed for their pertinence and effort should be made to ensure that they are collected in a reliable and valid fashion.

Measurement not only assists administration but also directly influences clinical activity. Consequently, clinical outcome data for individual patients needs to be approached with care and respect for the data collection process. All too often decisions regarding treatments and services are made without the benefit of good data. Unfortunately, busy clinicians are often unable to find time to collect measurements. Also, many clinicians tend to see data collection as a misplaced attempt to enforce accountability or as being irrelevant to their jobs. These factors can lead to perfunctory data collection that leads to a "garbage in - garbage out" situation wherein useful results cannot be derived from the data.

Although many clinicians do not see themselves as data collectors, information gathering is an essential and ongoing process that all clinicians routinely undertake. The use of rating scales, forms or other psychometric instruments merely formalizes the processes clinicians already do every day. All mental health personnel are encouraged to recognize that besides being good clinicians, they can vitally contribute to research and the administration of quality service delivery.

Measurement scales

The following are a sampling of instruments that appear useful for clinical, research, and administrative purposes in early psychosis:

SCALES FOR ASSESSING GENERAL SYMPTOMS

- **The Positive and Negative Syndrome Scale (PANSS)** (391) (74)
  a comprehensive observer rating scale that can be combined with a structured interview schedule
- **The Brief Psychiatric Rating Scale (BPRS)** (392)
  a widely used observer rating scale embedded in the PANSS. It has a smaller number of items than the PANSS

SCALES FOR ASSESSING SPECIFIC SYMPTOMS

- **Calgary Depression Scale** (393) (394)
  specifically assesses depression in schizophrenia
- **Beck Depression Inventory (BDI)** (395, 396)
  popular 21 item self-report measure of depression severity
- **Beck Hopelessness Scale (BHS)** (397)
  a self-report measure to assess suicidal risk
- **Scale for the Assessment of Positive Symptoms (SAPS)**
- **Scale for the Assessment of Negative Symptoms (SANS)** (398)

SCALES FOR INPATIENT ASSESSMENT BY NURSING STAFF

- **The Routine Assessment of Patient Progress (RAPP)** (399) (400)
  a validated measure of symptoms and function completed by nursing staff
- **Nurses Observation of Inpatient Evaluation (NOSIE)** (401)
  a widely used nurse rating scale

GLOBAL RATING SCALES

- **Global Assessment of Functioning (GAF)** (333)
  quick measure that utilizes both symptoms and functioning; the GAF represents Axis V of the DSM-IV multi-axial diagnostic system
- **Scale of Occupational and Functional Assessment (SOFAS)** (333)
  derivation of the GAF that omits symptoms as a basis for the rating
- **Clinical Global Impression (CGI)** (402)
- **Clinical Global Scale of Improvement (CGI-Imp)** (402)

Measurement scales / continued

QUALITY OF LIFE AND ROLE FUNCTIONING

- **Quality of Life Interview** (403)
  a comprehensive scale specifically formulated for schizophrenia
- **The MOS 36-item short form health survey (SF-36)** (404)
  a generic quality of life scale widely employed in many health care areas
- **Role Functioning Scale** (405)
  a simple four-item scale with specific anchor points assessing four areas of functioning
- **Life Skills Profile** (406, 407)
  a measure of function and disability focused on schizophrenia
- **Drug Attitude Inventory** (408, 409) (410)
  a measure of subjective response that may be useful to predict adherence to medication
- **Bay Area Functional Performance Evaluation (BaFPE)** (411)
  frequently used in Occupational Therapy as a measure of functional status

INTELLIGENCE AND COGNITIVE ABILITIES

Intelligence testing may only be performed by psychologists. Many neuropsychological instruments are also restricted. Therefore, consultation with a qualified practitioner should be undertaken regarding these types of assessments.

Section VIII

ADDITIONAL EARLY PSYCHOSIS RESOURCES

Website resources

The Early Psychosis Initiative (EPI) Mental Health Evaluation & Community Consultation Unit, British Columbia, Canada
http://www.mheccu.ubc.ca/

Available for download on the website:

- Additional copies of this document (Early Psychosis: A Care Guide)
- Early Psychosis: A Care Guide - Summary
- Early Psychosis: A Guide for Physicians
- Early Psychosis: A Guide for Mental Health Clinicians
- Early Identification of Psychosis: A Primer
- Minimizing Damage - Maximizing Outcome: The Importance of Early and Effective Treatments for Psychosis (Brochure in English, Punjabi, and Chinese)

Also available on the website:

- general information on psychosis
- information on British Columbia's Early Psychosis Initiative (framework, minutes, funded demonstration projects, etc.)
- British Columbia regional contact and referral information

Available through the author:

- **Core Psychosocial Treatments materials**
  produced for Mheccu workshop by Dr. David Erickson
  Address: Dr. David Erickson, Detwiller 2 East, UBC Hospital,
  2255 Wesbrook Mall, Vancouver BC, V6T 2A1,
  Tel: (604) 822-0767 Fax: (604) 822-1706 Email: dhericks@vanhosp.bc.ca

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Website resources / continued

The Early Psychosis Prevention and Intervention Centre (EPPIC) Victoria, Australia
http://www.eppic.org.au/

Available for download on the EPPIC website:
- Early Psychosis Information Sheets
- The Early Psychosis Training Pack (10 Modules)
- A guide for general practitioner's and others to the Early Diagnosis and Management of Psychosis
- Newsletter: *Early Psychosis News*

Available for order (order form on the website):
- *Manual for Psychoeduation in Early Psychosis*
- *Manual for Working with Families in Early Psychosis*
- *The Australian Clinical Guidelines for Early Psychosis*
- *Community Video - A Stitch in Time: Psychosis . . . Get Help Early.*
- *Video for General Practitioners - A Stitch in Time: Psychosis . . . Get Help Early.*
- *Video for Mental Health Professionals – Sally's Story*

Also available on the website:
- Information about EPPIC's clinical services and research
- Information on EPPIC site visits and workshops

British Columbia Schizophrenia Society (BCSS) British Columbia, Canada
http://www.bcss.org/

Available for download on the website:
- Booklet – *Early Psychosis: What Families and Friends Need to Know*

Available for order (order form on the website):
- High School Curriculum Resource – "Reaching Out: The Need For Early Treatment"
- Video for School and Community Health – "Reaching Out"
- Video for Physicians and Mental Health Professionals – "Reaching Out"

Also available on the website:
- Educational material on schizophrenia
- Information on BCSS programs and advocacy
- Other resources including the "Friends" newsletter and information on family support

Website resources / continued

Canadian Mental Health Association – BC Division British Columbia, Canada
http://www.cmha-bc.org/

Available for download on the website:
- BC Early Intervention Study
- BC *Mental Health Act* in Plain Language

Also available on the website:
- "Visions" BC's Mental Health Journal – including an issue on early intervention
- Information on CMHA-BC programs and other resources
- Information on mental health issues specific to BC

Canadian Mental Health Association – Canada: Youth and Mental Illness – Early Intervention Canada **http://www.cmha.ca/english/intrvent/**

Available for download on the website:
- An Introduction to Early Psychosis Intervention: Some Relevant Findings and Emerging Practices
- Newsletters – *Family to Family: For First-Episode Psychosis Families*
- *A Guide to Canadian Early Psychosis Initiatives*
- Brochure – "What is Psychosis?"
- Brochure – "Youth and Psychosis – What Parents Should Know"
- Brochure – "Early Psychosis – Time is of the Essence"

Available for order (order form on the website):
- Above mentioned brochures in English, French and Chinese
- Early Psychosis Parent Video – One Day at a Time

Website resources / continued

Additional websites for early psychosis projects and/or educational materials

Helping Overcome Psychosis Early (HOPE) Vancouver/Richmond EPI Demonstration Project, British Columbia Canada **http://www.hope.vancouver.bc.ca**

Early Psychosis Program University of Calgary/Foothills Hospital, Alberta, Canada
http://www.ucalgary.ca/cdss/epp

The Prevention and Early Intervention Program for Psychoses (PEPP)
London Health Sciences Centre/University of Western Ontario, Ontario, Canada
http://www.pepp.ca

International Early Psychosis Association (IEPA) Melbourne, Australia
http://www.iepa.org.au

National Early Psychosis Project (NEPP) Melbourne, Australia
http://ariel.ucs.unimelb.edu.au/~nepp/

TIPS - an early intervention program for psychosis Norway
http://www.tips-info.com

Swiss Early Psychosis Project (SWEPP) Switzerland
http://www.rehab-infoweb.net/swepp/

Initiative to Reduce the Impact of Schizophrenia (IRIS) England
http://www.iris-initiative.org.uk/index.shtml

Books

Recognition and Management of Early Psychosis: Preventative Approach
McGorry, P.D., Jackson, H.J. & Perris, C.
1999 Cambridge University Press

Early Intervention in Psychosis: A Guide to Concepts, Evidence and Interventions
Birchwood, M., Fowler, D. & Jackson, C.
2000, Wiley and Sons Ltd.

First Episode Psychosis
Aitchison, K.J., Meehan, K. & Murray, R.M.
1999, Martin Dunitz Ltd.

Implementing Early Intervention in Psychosis: A Guide to Establishing Early Psychosis Services
Edwards, J. & McGorry, P.D.
2002, Martin Dunitz Ltd.

Further information on BC legal and ethical issues

- The Guide to the *Mental Health Act* and the Freedom of Information Fact Sheet are available at **http://www.hlth.gov.bc.ca/mhd/**
- The BC *Mental Health Act* in Plain Language is available at **http://www.cmha-bc.org/**

Section IX

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