

# **Psychosis Risk and Prevention of Persistent and Severe Mental Illness: Implications for Social Work Practice**

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*The prognosis of schizophrenia and other psychotic disorders may be improved through efforts to identify at-risk individuals and to provide early interventions prior to the first episode of psychosis. Psychosis-risk syndrome is gaining recognition as a distinct clinical condition, and may be included as a diagnosis in the upcoming version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V). As direct mental health practitioners, social workers are in an ideal position to both address the diverse psychosocial needs and improve the accessibility of services for this difficult-to-define population. As macro-level practitioners, social workers can provide a valuable perspective on ethical issues while advocating to reduce the stigma surrounding the provision of intensive mental health services to individuals struggling with psychosis-risk syndrome.*

In recent years, an increasing emphasis has been placed on early identification and intervention in mental health research. A diagnosis known as psychosis-risk syndrome may soon be included in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, and will eventually be incorporated into general mental health practice (Yung, Nelson, Thompson, & Wood, 2010; Corcoran, First, & Cornblatt, 2010). Emerging evidence supports the potential for early assessment and intervention to improve the long-term prognosis of schizophrenia and other psychotic disorders (Miller et al., 2003; 2002; McGorry et al., 2002). Developing effective treatments for the attenuated symptoms that present prior to the onset of the illness may improve outcomes and possibly even prevent the chronic mental illness from occurring in its entirety. These symptoms can include non–diagnosis-specific negative symptoms such as social withdrawal and a lack of motivation, as well as less-intense forms of the positive symptoms unique to psychosis, such as paranoid delusions and hallucina-

tions (Miller et al., 1999). The definition of psychosis risk is based on either the presence of attenuated psychotic symptoms, the occurrence of a brief and self-remitting psychotic break, or by a family history of a psychotic disorder, accompanied by a recent decline in functioning (Yung, McGorry, McFarlane, Jackson, Patton, & Rakkar, 1996; Yung et al., 1998).

Social work constitutes a substantial portion of mental health services provided nationwide, often serving as the first point of contact with the mental health system for many individuals. Therefore, the social work profession is integral to the development and implementation of practice and policy for the psychosis-risk population. The present paper examines psychosis risk in the context of micro- and macro-level social work. The clinical segment focuses on the early identification of psychosis-risk symptoms and the potential for psychosocial intervention approaches that are specific to this population. Clinical involvement at this early stage allows a rapid response to the first psychotic episode, which greatly influences the severity of disability associated with schizophrenia and other psychotic disorders (Marshall, Lewis, Lockwood, Drake, Jones, & Croudace, 2005; Drake, Haley, Akhtar, & Lewis, 2000). Macro-level issues of interest to social workers focus on addressing the ethics of treating a population that has not yet developed a mental illness, as well as ameliorating the stigma involved in seeking treatment at this vulnerable stage.

### **Assessment of Psychosis**

Clinical methods used to identify individuals at an elevated risk for schizophrenia have recently progressed from heredity-based estimates to comprehensive assessments of psychosis-risk symptoms. Early definitions used the family history method, in which the high-risk designation was based solely on genetic relatedness. In the absence of other diagnostic strategies, the family history method carried a rather modest predictive validity of approximately 10%, and was limited to offspring of a parent with schizophrenia (Cornblatt & Obuchowski, 1997). Such a low conversion rate raises significant ethical questions, as providing

treatment at this stage would mean treating nine “well” individuals for every one “sick” person (Addington, 2003).

Recently, dedicated assessment tools have been used to identify individuals who meet the relatively stringent criteria of psychosis-risk syndrome, a diagnosis proposed for inclusion in the *DSM-V* (Yung, et al., 2010; Corcoran, et al., 2010). Contemporary definitions of psychosis risk revolve around symptoms rather than heredity. These symptoms can be similar to those experienced in schizophrenia, but of attenuated severity or duration. Psychosis risk can still be defined based on family history as well, but only when it is accompanied by a recent decline in functioning (Yung et al., 1996). The Structured Interview for Prodromal Syndromes and Scale of Prodromal Symptoms (SIPS/SOPS) looks specifically at recent symptoms and changes in functioning. SIPS/SOPS is an assessment tool that allows clinicians to identify psychosis risk with greater validity than the family history method used in earlier studies (Miller et al., 1999). Individuals identified by the SIPS/SOPS diagnostic instrument convert to psychosis at rates as high as 43–46% after 6 months and up to 50–54% after 12 months (Miller et al., 2003; 2002). Social work training in SIPS/SOPS and other assessment tools may lead to increased identification of psychosis-risk syndrome in the general population, allowing more opportunities for early intervention.

### **Intervention**

Opportunity for the development of preventive treatments has expanded as researchers have become increasingly adept at identifying an at-risk period for psychosis. Research in this area is promising, with one randomized-control trial demonstrating the superiority of low-dose risperidone in combination with cognitive behavioral therapy (CBT) over “needs-based intervention” finding a significant difference in rates of transition to psychosis (9.7% versus 35.7% for the control condition) and a reportedly low incidence of side effects (McGorry et al., 2002). Another randomized-control trial of psychosis-risk intervention found a strong but statistically insignificant trend supporting the efficacy of olanzapine over placebo in preventing the onset of psychotic

disorder (34.5% versus 16.1% conversion). This study likely suffered from deficiencies in statistical power, as it had a low sample size limited by the lack of research participants who met psychosis-risk criteria (McGlashan et al., 2004). The authors believed that these results showed promise for the intervention; however, this must be interpreted with caution because of the failure of the effect to withstand statistical testing.

Regarding treatment modalities, medication alone and interventions focused primarily on attenuated psychotic symptoms may not produce the widespread changes in personal and social functioning that would be needed to prevent long-term psychiatric disability. Instead, this group may require intensive multi-systemic interventions that incorporate issues related to school, employment, housing, family, and other interpersonal relationships as integral components of the pathway to recovery (Fowler et al., 2010). However, psychosocial intervention for psychosis-risk syndrome is a new and developing field, with strong promise but little available published data.

The only published data on psychosocial intervention at this phase comes from McGorry et al. (2002), who identified a significant reduction in rates of conversion to psychotic disorder among participants receiving CBT. However, the CBT group was simultaneously receiving a low-dose antipsychotic medication, preventing a clear interpretation of whether this effect was due to the pharmacological treatment, psychosocial treatment, or both. Despite the lack of published data, most psychosis-risk clinics do include supportive therapy sessions as well as case management for addressing specific problems, such as housing and income issues, while some also include additional psychosocial interventions such as stress-management treatment (Gleeson, Larsen, & McGorry, 2003; Addington et al., 2007).

Many psychosis-risk clinics embrace the use of family interventions to address psychosocial issues in the client (Lefley, 2009). The psychosis-risk period is an ideal time for family-based interventions, as many families are present and willing to provide support and assistance to the client. These families do not show the resentment that tends to emerge in family members at later stages of chronic mental illness (Wong, Davidson,

McGlashan, Gerson, Malaspina, & Corcoran, 2008). Emotional involvement, warmth, and positive comments from family members are associated with an improved symptom profile in the client, suggesting that early psychosocial interventions targeting the family may improve prognosis among adolescents with psychosis-risk syndrome (O'Brien, Gordon, Bearden, Lopez, Kopolowicz, & Cannon, 2006). Although evidence for the efficacy of interventions in the psychosis-risk stage is lacking, there is maintained conviction that the potential benefits of developing an effective intervention justify further exploration (Wyatt & Henter, 2001). In this realm, social work can establish itself as a driving force in the prevention of psychotic disorders through the development of effective psychosocial and family interventions.

### **Reducing the Duration of Untreated Psychosis**

One potential point of intervention for social workers involved with at-risk clients pertains to the early identification of conversion to psychosis. Duration of untreated psychosis (DUP) is the interval between the onset of psychotic symptoms and the initial contact with mental health services. Surprisingly, despite the widespread impact of symptoms, individuals in their first episode of psychosis delay initiating treatment for a substantial period of time. Studies estimate that the DUP lasts a median of 26 weeks and a mean of 1–2 years, with some patients waiting many years to seek treatment (Larsen et al., 2001; Loebel, Lieberman, Alvir, Mayerhoff, Geisler, & Szymanski, 1992).

However, early detection programs can significantly reduce the duration of untreated psychosis (Melle et al., 2004; Johannessen et al., 2001). Ongoing psychotherapy through psychosis-risk services provides a venue for rapid identification and assessment at the onset of psychosis. For those not in treatment, community early detection programs in conjunction with utilization of psychiatric care improves access to early interventions and leads to widespread decrease of DUP. In one study, researchers documented a reduction in mean DUP from 114 weeks to a mean of 26 weeks, following the implementation of an early detection program (Johannessen, et al., 2001). Empirical studies associate

longer DUP with increased symptoms and decreased quality of life, as well as a lower likelihood of remission and, consequently, impaired functioning between episodes of psychosis (Marshall et al., 2005; Drake et al., 2000). Shorter DUP, on the other hand, is associated with improved functioning, reduced symptoms, and improved responsiveness to ongoing treatment (Perkins, Gu, Boteva, & Lieberman, 2005; Robinson, Woerner, McMeniman, Mendelowitz, & Bilder, 2004).

Early medical interventions embrace a different form than treatments for fully developed chronic medical conditions, and this same approach should be considered for early intervention with psychiatric conditions, including psychosis (Francey et al., 2010). Routine treatment for schizophrenia includes long-term antipsychotic medication with intermittent hospitalizations, which may not be an appropriate approach for the psychosis-risk population (Lehman & Steinwachs, 1998). Some researchers propose less-stressful alternative treatments, including in-home services, anxiety medication, and emotional support for the client and his or her family (Moran, 2009; Cullberg, Thoren, Abb, Mesterton, & Svedberg, 2000). One study found that the duration of illness prior to psychosocial treatment had a greater impact on negative symptoms and length of later rehospitalization than duration of psychosis prior to the initiation of antipsychotic medications (De Haan, Linszen, Lenior, De Win, & Gorsira, 2003). Further research is necessary to explore the efficacy of psychosocial interventions compared to psychopharmacological treatment (Bola, Lehtinen, Culberg, & Ciompi, 2009).

### **Social Workers' Macro Role**

As a profession devoted to the integration of direct clinical services with community level interventions, social workers are positioned to address macroscopic issues related to the ethics, accessibility of services, and social perception of psychosis-risk syndrome. Social workers can advocate for greater access to and use of preventive services for psychosis risk while at the same time addressing the ethical impact on the provision of services prior to illness onset.

## **Ethics of Intervention Prior to Onset of Mental Illness**

Ethical issues are prevalent in psychosis-risk research. By definition, some individuals who meet criteria for psychosis risk will never develop a full psychotic disorder, regardless of whether or not they received treatment. Individuals with psychosis-risk syndrome who later exhibit a remission of symptoms are known as “false-positives,” in that they were incorrectly identified as positive for developing a psychotic disorder (Miller et al., 2003; Yung et al., 2003). In lieu of the benefits of early intervention, the primary benefit of treatment is lost to those who turn out to be false-positives. For this group, the negative effects of unnecessary treatment include the stigma of receiving psychiatric treatment and the effects of unneeded medication, which may outweigh the perceived benefits.

Receiving treatment as a false-positive means that counseling, and possibly medications, are being provided for a syndrome that will never develop. However, individuals with psychosis-risk syndrome do still have clinically significant psychiatric symptoms and would benefit from treatment. In a chart review of 47 individuals enrolled in services at a psychosis-risk research clinic, 90% of individuals identified as at-risk had previously received psychiatric services (Preda, Miller, Rosen, Somjee, McGlashan, & Woods, 2002). Even clients who do not develop a psychotic disorder often develop other Axis I psychiatric disorders and still have psychological issues that can benefit from early intervention (Schaffner & McGorry, 2001). For example, the McGorry et al. (2002) study, which provides the only published evidence for an efficacious intervention at the psychosis-risk stage, also found improved scores across all areas of functioning among the group that did not develop a psychotic disorder. This indicates that psychosis-risk treatment does not solely benefit those that later develop schizophrenia.

Psychiatric treatment may improve symptoms, but it simultaneously exposes the recipient to the effects of stigma. These effects include a reduction in self esteem, perceptions of devaluation of discrimination, and social withdrawal (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). Stigma presents

a risk of damage to self-image, destabilizing interpersonal relationships, and inflicting feelings of being “fragile, damaged, or a little bit sick” (Corcoran, Malaspina, & Hercher, 2005). However, initial examination into this issue suggests that most individuals receiving services see the evaluation as beneficial; they prefer to receive accurate information regarding their at-risk status rather than to continue being confused about the meaning and prognosis of their developing symptoms. The clarification of the condition appears to ameliorate much of the stigma related to treatment (Addington, 2003).

Ethical issues relating to non-maleficence, or treatment risk, become more complex when antipsychotic medications are prescribed. An early intervention study showed that at-risk individuals who were given low doses of antipsychotic medication converted to psychosis at a much lower rate than those who simply received case management (McGorry et al., 2002). The trade-off is that these drugs may have quite severe side effects. Psychosis-risk studies conducted to date have prescribed very low doses of antipsychotic medications, such as olanzapine and risperidone, which only produced minor side effects that were easily managed through consultations with the psychiatrist (McGorry et al., 2002; McGlashan et al., 2004). Despite negligible medical side effects, antipsychotic medications cause significant weight gain that negatively affects self-image and long-term risk of obesity and diabetes (Corcoran, et al. 2005). This will continue to be a difficult ethical issue as further research is conducted on the pharmacotherapy of psychosis-risk syndrome.

### **Advocacy**

As the issue of psychosis risk becomes more recognized in the community, it will be met by novel manifestations of stigma and barriers to treatment. In these circumstances, responsibility for addressing communal and societal issues falls under the purview of the social work profession. One topic of concern is the inequity in access to services early in the course of mental illness. For example, African Americans have historically been vulnerable to prolonged exclusion from treatment due to greater



levels of community stigma and socioeconomic disparities. Consequently, this population can be less likely to receive psychiatric care following their initial contact with service providers compared to other racial and ethnic groups (Merritt-Davis & Keshevan, 2006).

One study found that African Americans compared to Asians or Whites are significantly more likely to make three or more contacts with mental health service providers before receiving treatment, are less likely to be referred by their general practitioner, and are more likely to have police involvement in their initiation of mental health services (Commander, Cochrane, Sasidharan, Akilu, & Wildsmith, 1999). Furthermore, a nationwide study by the Centers for Disease Control and Prevention identified numerous barriers to recruitment among racial minority populations, including the knowledge of human subject abuses by past researchers, an absence of information regarding current research practice, distrust of informed consent and institutional review boards, and suspicion of research scientists. These barriers exist despite a general belief among this population that medical research is important and beneficial (Freimuth, Quinn, Thomas, Cole, Zook, & Duncan, 2001). Although complicated racial inequities endure, social workers can provide community psychoeducation in an effort to reduce stigma while simultaneously working to rectify racial disparities in the attention paid to psychiatric issues by primary care physicians.

## **Conclusion**

Despite growing evidence for a distinct psychosis-risk period preceding the onset of schizophrenia, individuals at risk for psychosis have received minimal attention on a societal level. New issues may arise once psychosis risk becomes a more recognized diagnosis and treatment shifts from research clinics to community care. The psychosis-risk population exists on the cusp of mental illness. It is difficult to predict the issues that may arise for this group, as no equivalent group has been so formally defined in the past; mental illness tends to be identified by existing behavior rather than susceptibility. Formal recognition is needed to pave

the way for the development of evidence-based interventions aimed specifically during the psychosis-risk phase, as well as to allow treatment coverage by insurance providers. Concurrently, this group needs support in the recognition that they may not develop a full psychotic disorder and should not be inflicted with the stigma that unfortunately accompanies chronic mental illness.

In looking toward the future, the proposed addition of psychosis-risk syndrome to the upcoming *DSM-V* (Yung, et al., 2010; Corcoran, et al., 2010) highlights the increasing prominence of preventive measures in the treatment of schizophrenia and other psychotic disorders. In both macro- and micro-realms, social workers are well poised to influence the development and implementation of services for this population. Effective intervention at this phase may depend less on psychiatric hospitalizations and antipsychotic medications and more on modifying learned behaviors, providing emotional and family support, and making accurate assessments early in the course of illness. As this diagnosis develops and evolves from a set of symptoms to a formal syndrome, there will be a growing need to alleviate stigma related to seeking treatment, and to carefully consider ethical issues regarding appropriate treatments for an at-risk population.

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