



Published in final edited form as:

*J Nerv Ment Dis.* 2013 June ; 201(6): 484–489. doi:10.1097/NMD.0b013e3182948084.

## Working with Asian American Youth at Clinical High Risk for Psychosis: A Case Illustration

Huijun Li<sup>1,2</sup>, Michelle Friedman-Yakoobian<sup>2</sup>, Grace Min<sup>2</sup>, Andréa Gngong Granato<sup>2</sup>, and Larry J. Seidman<sup>2,3</sup>

<sup>1</sup>Department of Psychology, Florida A & M University, 501 Orr Drive, Tallahassee, FL 32307

<sup>2</sup>Department of Psychiatry, Beth Israel Deaconess Medical Center, Harvard Medical School, 75 Fenwood Road, Boston, MA 02115

<sup>3</sup>Massachusetts General Hospital, Boston, MA

### Abstract

The idea of a clinical high risk (CHR) for psychosis has focused attention on early intervention to prevent or attenuate psychosis. However, many clinicians may still not be very familiar with the concept of CHR. Current studies have not allowed for an in-depth examination of the challenges and strategies of working with youth from the range of racial/ethnic minority families, Asian American families in particular. The purpose of this paper is three fold. First, we critically review Asian cultural values and beliefs about mental illness, psychosis in particular, while highlighting specific challenges that Asian American families encounter. Second, we provide a clinical case to illustrate these challenges and inform clinical practice when working with Asian youth at risk for psychosis and their families. Third, practical and easy-to-follow clinical strategies are provided. Implications for clinical practice and directions for future research are presented.

### Keywords

clinical high risk; schizophrenia; Asian American youth

### Introduction

Psychotic disorders remain seriously disabling, life-long illnesses despite treatment advances. As a result, in parallel with other chronic physical illnesses, such as diabetes and heart disease, the scientific focus has shifted to early intervention and prevention in order to improve outcomes. In the field of psychotic disorders, this focus has generated an interest in the putative “prodromal” phase of illness (“clinical high risk” syndrome/CHR), the stage just prior to full psychotic syndrome. This stage usually lasts from a few months to about five years prior to the onset of a diagnosable psychotic disorder (Yung, 2007) and has been associated with a range of clinical, psychosocial, and neurocognitive impairments, and brain structural alterations (Cannon et al., 2008; Giuliano and Li et al., 2012). Systematic research to determine effectiveness of treatments for CHR is just emerging, but there is preliminary evidence for the efficacy of psychosocial (CBT, family psychoeducation) and pharmacological treatments (low dose antipsychotic medication, omega-3 supplements) for mitigating, delaying, and/or preventing onset of psychotic disorders (Fusar-Poli et al., in

Corresponding Author: Huijun Li, Department of Psychology, College of Arts and Sciences, Florida A & M University, 501 Orr Drive, Tallahassee, Florida 32307, huijun.li@famuedu.edu, Phone: 850 412 6608, Fax: 850 412 5096.

Conflicts of Interest: For the remaining authors none were declared.

press; Preti and Cella, 2010). The detection and intervention of the CHR symptoms preceding the onset of definite psychosis has the potential to prevent suffering for individuals and families, as well as reduce losses in social/role and educational functioning that accompany the development of psychotic illness. Several research groups around the world have developed criteria for assessing CHR (Klosterkotter et al., 2001; McGlashan et al., 2010; Yung and McGorry, 1996). The Structured Interview for Prodromal Syndromes (SIPS) and a scoring rubric, the Scale of Prodromal Symptoms (SOPS), is created, validated, and used in the United States (McGlashan, Walsh, Woods, 2010; Miller et al. 1999, 2002). The SIPS/SOPS has been considered the gold standard in identifying risks for psychosis. It has been and is being validated in different cultural groups across the world (e.g., Lemos et al., 2006). SIPS/SOPS has been used in National Institute of Mental Health funded multisite studies, such as the North American Prodrome Longitudinal Study (Addington et al., 2007). Research findings show individuals who met SOPS criteria demonstrate an average rate of conversion to diagnosable psychosis of about 35% over 2.5 years and 20% at one year follow-up (e.g., Cannon et al., 2008; Lemos et al., 2006; Miller et al., 2002; Seidman et al., 2010).

The SIPS/SOPS identifies helping seeking young adults between ages 14 and 35 who meet one or more of the following three categories of CHR:

1. **Attenuated Positive Symptom Prodromal Syndrome (APS):** Characterized by milder psychotic-like symptoms that have developed or increased in the past year such as new sensitivity to sights and sounds, hearing whispers that a person realizes are not real, or getting confused about whether something is real or part of a dream. Individuals who experience this syndrome are distinguished from those with fully psychotic symptoms by the fact that they maintain a degree of insight that the experiences and concerns are in their own mind.
2. **Genetic Risk and Deterioration Prodromal Syndrome (GRD):** Characterized by having a genetic risk for psychosis (first degree relative with a psychotic disorder or meeting criteria for schizotypal personality disorder) and a recent drop in daily functioning equivalent to 30% drop in Global Assessment of Functioning rating.
3. **Brief Intermittent Psychotic Symptoms Prodromal Syndrome (BIPS):** Characterized by the experience of fully psychotic symptoms that are brief (occur less than an average of 1 hour per day, 4 days per week) and have developed within the past 3 months.

In most cases, the development of signs of CHR is associated with significant changes in functioning. These changes include new difficulties concentrating in school, withdrawal from friends and extracurricular activities, changes in self-care and declining grades, reduced motivation, depression and anxiety, and declining school performance (Cornblatt et al., 2007; Niendam et al., 2007; Seidman et al., 2010). Such changes are often what attract initial concern by the school, pediatricians, and parents.

An important consideration, when working with young people showing signs of CHR, is that the majority of these individuals will not develop a psychotic disorder. Studies that have followed young adults with these symptoms over time have found that about 35% of these individuals will develop a psychotic disorder within the next 2.5 years, whereas 65% of others will have either stable or remitting symptoms (Cannon et al., 2008; Fusar-Poli et al., 2012; McGlashan et al., 2006; Ruhrmann et al., 2010). However, as described above, these individuals do experience significant difficulties that warrant treatment, even when their attenuated psychiatric symptoms remit (Addington et al., 2008). Moreover, even in the patients who do not transition to psychosis, a significant number continue to have substantial levels of continuing disability (Addington et al., 2011). An important challenge for treatment

of individuals at CHR is balancing the potential benefits of early identification and treatment with the risks of “false positives” and labeling individuals who may not be developing psychosis (Wong et al., 2009; Yang et al., 2010). This challenge can be particularly complex when working with populations such as Asian American families, whose cultural context has embedded within it a highly stigmatized concept of mental illness (Li and Seidman, 2010).

The purpose of this paper is three fold. After the overview of the CHR syndrome above, including the primary symptoms and how they can be recognized, we first review Asian American cultural values and beliefs about mental illness, psychosis in particular, while highlighting specific challenges that Asian American families encounter in seeking mental health services. It should be noted that Asian Americans are a very diverse group but they do share many cultural beliefs and practices. Secondly, we provide a clinical case to illustrate these challenges and inform clinical practice when working with Asian youth at risk for psychosis and their families. Thirdly, we provide practical and easy-to-follow clinical strategies and directions for possible future research.

## Challenges of Providing Treatment to Asian American Youth and Their Families

Asian Americans have been found to have a longer duration of untreated psychosis than other ethnic groups (Ryder et al., 2000; Skeate et al. 2002). Furthermore, Asian American families tend to underutilize mental health services (Abe-Kim, et al., 2007), have less favorable help-seeking attitudes than their White counterparts (Masuda and Boone, 2011; Ting and Hwang, 2009), and terminate services prematurely (Shea and Yeh, 2008).

Different factors may hinder Asian American families from seeking help for their child in a timely and consistent manner. First, stigma has been shown to interfere with help-seeking for families of young people with psychotic symptoms (Compton et al., 2004). In Asian culture, seeking mental health services is often regarded as a violation of Asian family hierarchy as it indicates family inadequacy (Sue, 1994) and a loss of “face” (Shea and Yeh, 2008). For these reasons, great effort is made to contain the illness within the family for as long as possible. Consequently, mental health stigma is considered a strong predictor of delay in the help-seeking process among many Asian American families. It is important to note, however, within-group differences such as acculturation level that affect views on mental health and its treatment (Shea and Yeh, 2008). Asian Americans who are more acculturated to the U.S. culture tend to be more tolerant of the stigma associated with psychological help, and are more open to discussing their problems with a mental health professional (Abe-Kim et al., 2007; Zhang and Dixon, 2003).

Second, mental illness is often believed to be a family problem in many Asian families (Kim and Omizo, 2003). Family caregivers tend to share responsibility for, and duty to, solve the “problem” within the family first (Ryder et al., 2000; Yang et al., 2010). Only when this approach fails do they resort to outside help such as churches, elders, clan and other informal social organizations, primary care providers, and mental health providers (Inman and Yeh, 2006). This decision is not solely made by the afflicted individual, but by family members and close relatives (Pearson, 1993; Yang et al., 2010). Consequently, while family support and involvement is critical in helping the affected individual, it could also hinder the individual from receiving timely treatment by mental health professionals.

Third, health and illness are culturally constructed experiences (Sheikh and Furnham, 2000; Wynaden et al., 2005). Different explanatory models of mental illness may affect a family's help-seeking behavior. The U.S. Department of Health and Human Services (2001a, b: 118)

represents a Vietnamese-American family's belief about schizophrenia and their way to help their oldest child,

“...His parents had a poor understanding of schizophrenia and were extremely distrustful of mental health providers. They thought that his psychosis was caused by mental weakness and poor tolerance of a recent heat wave. They believed that they themselves could help by providing him with their own food and making him return to school. These...differences in beliefs caused the parents to avoid the use of mental health services.”

Fourth, language barriers is another important factor to consider given that mental health treatment relies on direct verbal communication (Sentell et al., 2007). Some Asian American families may lack English proficiency required for a thorough assessment of the child and identification of important contributors to the process of care, diagnosis, and treatment (Sentell et al., 2007). In addition, limited English proficiency is associated with lower adherence to treatment among Asian Americans with schizophrenia (Gilmer et al., 2009).

Fifth, according to the Institute of Medicine (2004), health literacy levels are lower among racial and ethnic minorities and individuals with limited education and English skills. Individuals who have poor mental health literacy tend to have higher rates of hospitalization and emergency care use. Studies on Chinese first-episode patients found that lack of knowledge about psychosis was one of the most common reasons given by patients and their parents for their delay in seeking psychiatric help (Chiang et al., 2005).

In summary, different factors affect an Asian American family's help-seeking behavior. Therefore, it is critical that we recognize the challenges that Asian American families encounter in our clinical practices and encourage their timely professional treatment. Below, we use a case example to illustrate the challenges and our efforts to provide culturally sensitive intervention in helping an Asian American youth with CHR and his family. This case is fictionalized to protect the confidentiality of the clients and the families in our clinic.

## The Case of Ming

### Introduction to the Clinic

Located at a Northeastern urban area of the United States, our outpatient clinic is devoted to early detection and intervention of clinical signs of risk for psychosis. The clinic serves youth and adults from racially/ethnically diverse backgrounds ages 14-35 and provides diagnostic assessments, individual and family-based treatment, school/work consultation and coaching, and community outreach/education. The clinic staff is structured around a multidisciplinary treatment approach and is made up of a clinical team that includes a medical director (child, adolescent and adult-certified psychiatrist), clinical team leader (licensed psychologist), and clinicians (social worker and psychology interns). Clinicians focus on helping clients and families to get back on track in their education and social lives by integrating treatment for symptoms of CHR with evidence-based and culturally sensitive individual and family-based approaches for treating co-occurring symptoms of depression and anxiety, which are often apparent in young people experiencing CHR.

### Reason for Referral: Background Information

Ming was a 15 year-old Chinese American male who was a high school sophomore at a private high school. Ming was admitted to this prestigious high school on a full academic scholarship. He was the only U.S. born son of working-class, Chinese-immigrant parents who spoke limited English. Both of Ming's parents worked full-time outside of the home, so he spent the majority of his time with his maternal grandmother during his early childhood. Ming was evaluated by the school's adjustment counselor following reports by teachers that

he was appearing increasingly distracted and withdrawn during class and appeared somewhat disheveled, leading teachers to wonder whether Ming might be depressed or using drugs. He had also been making frequent visits to the school nurse with complaints about headaches and other ailments. According to the adjustment counselor, Ming noted that he felt that he might be “depressed” but also indicated that more recently he had been worried that something was wrong with his brain. Ming then went on to note that he was having trouble with his ears, feeling like everything was louder than usual and occasionally he was hearing whispers that no one else seemed to hear. He also described a number of unusual somatic complaints, including a concern that radio waves produced by satellites might be affecting the flow of blood in his brain, causing him to forget things and to have trouble concentrating on his homework. After further questioning, Ming admitted that this belief was unusual and that it was probably his imagination, but noted he had become increasingly preoccupied with this idea over the past month.

Fortunately, the adjustment counselor had attended an informational workshop by staff from our clinic aimed at teaching school personnel ways to recognize early warning signs of mental illness. She indicated to Ming that she was glad that he told her about his experiences, and explained that there could be a number of explanations for this. She suggested that further evaluation through our clinic could be very helpful for gaining a better understanding of his difficulties. Ming agreed that he thought this would be helpful, but worried that his parents would not understand the need for an evaluation. The adjustment counselor invited Ming's parents to attend a meeting in which she recommended they seek further evaluation to gain a better understanding of his symptoms and clinical impressions regarding his risk for an emerging mental illness. Ming's parents were polite during the meeting, but appeared to have a great deal of difficulty understanding her suggestion that Ming's difficulties in school might stem from psychological difficulties. They seemed uneasy and embarrassed while hearing the counselor talk about Ming's difficulties. They noted repeatedly that “Ming doesn't study hard enough” and apologized, “we work full time so we can't help him with his studies.” They were polite when phone numbers were provided for the clinic, but they did not follow up until they were invited for a second meeting at the school during which the adjustment counselor offered to call together with them in the room.

Observations: Different reactions between Ming and his parents were observed regarding the counselor's suggestion of evaluation. Psychological difficulties may not be unacceptable notion to Ming's parents and their initial reaction could reflect a sense of shame and fear of stigma. . It could also be that Ming's parents did not have the mental health literacy and knowledge to understand Ming's needs and the counselor's explanations. These, along with their limited English proficiency and tight work schedule, might account for their not following through with the counselor's advice to contact the clinic.

### Initial Clinic Visit

Ming's father accompanied him to the first part of his initial meeting at the clinic, but left early in order to get back to work. His father appeared anxious about the purpose of the appointment and stated, “How many times does Ming's school say he has to come here?” and further hinted, “It is important that Ming spend all his free time studying.” Before this meeting, the clinical team (psychiatrist, psychologist, and social worker clinician) consulted with a multicultural researcher from a Chinese background about culturally sensitive approaches to working with Ming's family. This helped the clinician meeting with Ming and his family to keep a number of things in mind to help provide a more comfortable experience for Ming and his family. For example, the clinician was sure to convey respect for Ming's parents and to underscore the value of Ming's parents in his life. The clinician carefully listened to Ming's father's concerns about how much time treatment would involve



and his worries that treatment would take away from time spent studying. Keeping in mind that Ming's parents might tend to say yes out of deference to authority and to be reticent to openly disagree, the clinician was careful to allow room for Ming's father to express his concerns and took time to make sure he really understood the goals of treatment before making any recommendations.

During the meeting, the clinician (aided by an interpreter) clarified that participating in the clinic was voluntary, and that the school was not requiring, but recommending, that Ming participate in the evaluation. They noted that the purpose of this evaluation was to help Ming get back on track with his school work (an idea that everyone seemed comfortable with). The clinician explained that this first meeting would involve asking Ming a number of questions to get a better sense of what might be causing his recent difficulties in school. Following this initial meeting, the clinician would be making recommendations to Ming and his family regarding the potential options that may be helpful to Ming.

Ming participated in a 2-hour evaluation which included a detailed psychosocial history and administration of the Structured Interview for Prodromal Syndromes (SIPS, McGlashan et al., 2010). During the evaluation, Ming noted he was surprised to find himself talking about some experiences and thoughts he had never before shared. Notably, he repeatedly asked the interviewer, "this is confidential, right?" for fear that his personal and family information might be shared with strangers. He was frequently assured that the clinic staff were required by law to keep his information confidential, unless he was expressing concerns that he was imminently at risk for harming self or others, or if there were concerns about abuse of a child or disabled individual in the home. Ming reported that, about twice per week over the past two months, he heard static-like whispers when no one was around, and even though he knew "this was impossible," he found himself wondering if he was picking up on radio signals produced by aliens. He was also having worries that other students at school could read his mind. He then noted, "I know this sounds crazy, but I keep thinking it anyway." The clinician empathized with Ming's wish to improve his school performance and validated his concerns about his brain. She reinforced that it was good that Ming had come to the clinic because there are a number of ways the clinic can help him to better understand his symptoms and to get back on track at school.

Observations: Consultation with fellow professionals constitutes the best clinical practice and in this case it may have helped the clinician form a culturally relevant treatment goal. Emphasizing a goal that was important to both Ming and his parents (getting back on track at school) was helpful for getting them on board with participating in the evaluation. Due to parental and Ming's concern regarding sharing information with the school or other people, it is critical to reassure confidentiality in working with Ming and his family.

### **Case Conceptualization and Treatment Planning**

Evaluation with the SIPS revealed that Ming met criteria for Attenuated Positive Symptom Prodromal Syndrome. That is, he was experiencing new symptoms in the past year that were attenuated forms of psychotic symptoms. These symptoms did not reach the level of severity of a full psychotic disorder (i.e., he did not experience full conviction in his unusual beliefs and experiences), but they did affect his current functioning and put him at risk for developing more serious symptoms over time. When providing feedback to Ming and his parents, the clinician described Ming's symptoms as difficulties with the way his brain processes information, and noted that these difficulties could worsen over time especially if treatment interventions were not implemented. Whether or not these difficulties would, in fact, become worse, learning about the symptoms and strategies for managing them could play an important role in prevention.

Observations: Being sensitive to the stigma and shame felt by this family, the clinician was very careful in explaining Ming's symptoms in a non-stigmatizing manner.

### Treatment Course

Ming was offered weekly therapy sessions focused on providing education about symptoms, reducing stress and with permission from Ming's parents, consulting with Ming's school to enhance school supports (e.g., reduced course load, help with developing a study plan and an efficient approach to completing assignments, permission to take tests in a quiet room separate from distractions of classmates).

Ming's clinician provided him with a stress-vulnerability framework for understanding his symptoms and treatment from a normalizing perspective. Ming was able to identify several ways to reduce his vulnerability, including continuing to abstain from drugs and alcohol, getting regular sleep, and participating in treatment. He also developed a wellness plan with his clinician to identify what would help if his symptoms were to get worse.

The clinician also provided cognitive-behavioral treatment (CBT) interventions, which involved helping Ming to learn about the link between thoughts, feelings and behaviors. The goal was to enhance his cognitive flexibility by identifying alternate explanations for some of the Ming's unusual experiences.

Early in the course of treatment, Ming met with the clinic psychiatrist for an evaluation of whether medication would be helpful for him. The psychiatrist and clinician discussed with Ming and his family the pros and cons of taking medication for his symptoms. Ming and his parents shared a collective apprehension about westernized medication. The psychiatrist recommended that he instead begin taking Omega 3 fatty acid supplements, which may help with mood and attention and may even provide protective effects for the type of symptoms Ming was experiencing (Amminger et al., 2010). Everyone felt more comfortable with trying this recommendation first and agreed to consider medications if other treatments did not work.

Ming's parents were also invited to participate in monthly family meetings focused on reviewing information about symptoms, enhancing communication skills within the family, and teaching the family to use a specific problem-solving structure for discussing and developing creative solutions to family goals (Mueser and Glynn, 1999). Ming's parents remained ambivalent about treatment, and only attended 3 meetings with the clinician over the course of the treatment. Despite infrequency, the clinician used these meetings to emphasize their importance in Ming's life and how meaningful their participation in Ming's treatment was for helping him to get the most out of treatment and to make progress towards getting back on track in school. In the family sessions, the clinician also encouraged Ming to help educate his parents about his symptoms and his treatment by sharing some of what he learned about his symptoms and the stress vulnerability model. Ming's parents appeared to be surprised to learn about Ming's symptoms. They noted they had not realized before that these concerns had been interfering with his focus on school work. Over time, Ming's parents began to indicate they felt that the treatment had been helpful to their son, especially once Ming earned B's during the following semester.

Observation: Asian American families may have concern that treatment will interfere with time for studying and that providing reassurance that treatment aims to help grades can help increase treatment engagement.

## Outcomes

After six months of treatment in the clinic, Ming and his clinician reviewed his progress, and the SIPS interview was repeated to assess his clinical risk. At that time, Ming reported that the frequency of hearing static-like whispers had significantly decreased to less than once per month. When these experiences did occur, he now conceptualized them as his brain playing tricks on him, rather than having a connection to aliens. Ming understood that when he had the thought about aliens or concerns that others could read his mind, he could employ the skills he learned in treatment to challenge these beliefs and reality test his thinking. He still occasionally felt changes in the blood flow of his brain but felt much less preoccupied by these feelings. At this assessment time point, these experiences were assessed as being “mild” on the SIPS interview, no longer meeting CHR criteria. Ming also reported that his concentration was improved, and, with a reduced course load, his grades had improved from F's to B's. Ming's school adjustment counselor reported that Ming appeared more relaxed at school and better able to concentrate. At that time, Ming and his clinician reduced the frequency of their sessions to every other week.

Observation: Not all cases will turn out as positively as Ming's. However, his case highlights the importance of receiving timely and culturally sensitive intervention in the early stages of a potentially progressive mental health problem.

## Discussion and Conclusion

Clinical high risk for psychosis (CHR) is not a well recognized problem among school age youth. In many cases, mental health professionals may not be fully trained to recognize the subthreshold psychotic symptoms, conduct diagnostic assessments, and provide appropriate interventions. In addition, youth and families from minority backgrounds may hold different cultural values and beliefs about mental illness, which may affect how they conceptualize their symptoms as well as their attitudes towards and engagement in treatment. Therefore, this article purports to introduce the concept of CHR, build further awareness of Asian American beliefs and challenges in mental health help-seeking process, and encourage mental health professionals to make timely referrals, and facilitate mental health agencies to provide culturally sensitive evaluation and treatment to Asian American youth with CHR.

Encouraging treatment engagement from Asian American parents can be an ongoing endeavor (Li and Seidman, 2010). It is important, however, not to view the parents' aversion to treatment as being neglectful or oppositional, but to be sensitive to cultural nuances and continue to engage them reasonably and empathically. Continued effort to include the parents in treatment is clinically and culturally appropriate.

We hope that the following strategies that we use in our clinic and that also have been recommended in the literature work well with Asian American youth and their families will help clinicians and researchers formulate their cases and research questions.

These strategies include:

1. *Highlight that treatment can help school performance and honor the importance of the family in the client's life.* Asian American families may focus on goals specific to educational attainment and family closeness. Emphasizing these values in treatment can help to improve treatment engagement.
2. *Realize “yes” does not always mean yes.* Asian American families typically value harmony and hierarchy. Due to the importance of showing respect for and not offending authority figures and the value of “keeping harmony” rather than openly showing disagreement, Asian American families may appear to agree to the



recommendation of the treatment provider even though they do not intend to actually follow through on those recommendations.

Finally, it should also be noted that there are still a number of challenges related to working with Asian American families that warrant clinical and research attention. These challenges include: 1) under-representation of Asian-American mental health providers; 2) lack of evidence base for culturally adaptive treatment in this area (e.g., no randomized controlled trials); 3) financial and time constraints in real-world clinics (e.g., evening hours may not be available, may not have access to interpreter); 4) low public mental health literacy; and 5) stigma and shame about mental illness that remain a problem cutting across all cultures and groups in the United States. Continued work is needed to enhance awareness of early signs of mental illness among all cultural groups, and to instill hope that early intervention can play an important role in prevention and recovery.

## Acknowledgments

Source of Funding: This research was supported, in part, by NIMH Grants U01 MH081928 (L. Seidman), P50MH080272 (R. McCarley, L. Seidman), 3P50MH080272-03S2 (R. McCarley, H. Li) and SCDMH82101008006 (L. Seidman).

## References

- Abe-Kim J, Takeuchi DT, Hong S, Zane N, Sue S, et al. Use of mental health-related services among immigrant and US-born Asian Americans: results from the National Latino and Asian American study. *Am J Public Health*. 2007; 97:91–98. [PubMed: 17138905]
- Addington J, Cadenhead KS, Cannon TD, Cornblatt B, McGlashan TH, Perkins DO, Seidman LJ, Tsuang MT, Walker EF, Woods SW, Heinssen R. on behalf of the NAPLS group. North American Prodrome Longitudinal Study (NAPLS): A collaborative multi-site approach to prodromal Schizophrenia. *Schizophr Bull*. 2007(33):665–672. [PubMed: 17255119]
- Addington J, Cornblatt BA, Cadenhead KS, Cannon TD, McGlashan TH, Perkins DO, Seidman LJ, et al. At clinical high risk for psychosis: outcome for nonconverters. *Am J Psychiatry*. 2011; 68(8): 800–805. Medline:21498462. [PubMed: 21498462]
- Addington J, Penn D, Woods SW, Addington D, Perkins DO. Social functioning in individuals at clinical high risk for psychosis. *Schizophr Res*. 2008; 99:119–124. [PubMed: 18023329]
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th. Washington, DC; Author; 2000.
- Amminger GP, Schäfer MR, Papageorgiou K, Klier CM, Cotton SM, Harrigan SM. Long-Chain omega-3 fatty acids for indicated prevention of psychotic disorders: a randomized, placebo-controlled trial. *Arch of Gen Psychiatry*. 2010; 67:146–154. [PubMed: 20124114]
- Cannon TD, Cadenhead K, Cornblatt B, Woods SW, Addington J, Walker E, Seidman LJ, Heinssen R. Prediction of psychosis in youth at high clinical risk: A multisite longitudinal study in North America. *Arch of Gen Psychiatry*. 2008; 65:28–37. [PubMed: 18180426]
- Chiang J, Chow A, Chan R, Law C, Chen E. Pathway to care for patients with first-episode psychosis in Hong Kong. *Hong Kong J of Psychiatry*. 2005; 15:18–23.
- Compton MT, Kaslow NJ, Walker EW. Observations on parent/family factors that may influence the duration of untreated psychosis among African-American first-episode schizophrenia-spectrum patients. *Schizophr Res*. 2004; 68:373–385. [PubMed: 15099619]
- Cornblatt BA, Auther AM, Neindam T, et al. Preliminary findings for two new measures of social and role functioning in the prodromal phase of schizophrenia. *Schizophrenia Bull*. 2007; 33:688–702.
- Fusar-Poli P, Bonoldi I, Yung AR, Borgwardt S, Kempton M, Barale F, Caverzasi E, McGuire P. Predicting psychosis: meta-analysis of transition outcomes in individuals at high clinical risk. *Arch Gen Psychiatry*. 2012; 69:220–229. Medline:22393215. [PubMed: 22393215]
- Fusar-Poli P, Borgwardt S, Bechdolf A, Addington J, Riecher-Rössler A, Schultze-Lutter F, Keshavan M, Wood S, Ruhrmann S, Seidman L, Valmaggia L, Cannon T, Velthorst E, De Han L, Cornblatt B, Bonoldi I, Birchwood M, McGlashan T, Carpenter W, McGorry P, Klosterkötter J, McGuire P,

- Yung A. The psychosis high-risk state: A comprehensive state-of-the-art review. *Arch General Psychiatry*. in press.
- Gilmer TP, Ojeda VD, Barrio C, Fuentes D, Garcia P, Lanouette NM, Lee KC. Adherence to antipsychotics among Latinos and Asians with schizophrenia and limited English proficiency. *Psychiatr Serv*. 2009; 60:175–182. [PubMed: 19176410]
- Giuliano AJ, Li H, Mesholam-Gately RI, Sorenson SM, Woodberry KA, Seidman LJ. Neurocognition in the psychosis risk syndrome: A quantitative and qualitative review. *Curr Pharm Des*. 2012; 18:399–415. [PubMed: 22239571]
- Inman, AG.; Yeh, C. Stress and coping. In: Leong, F.; Inman, AG.; Ebro, A.; Yang, L.; Kinoshita, L.; Fu, M., editors. *Handbook of Asian American Psychology*. Thousand Oaks, CA: Sage; 2006. p. 323-340.
- Institute of Medicine. *Health Literacy: a prescription to end confusion*. Washington, D.C.: National Academies Press;
- Kim BSK, Omizo MM. Asian cultural values, attitudes toward seeking professional psychological help, and willingness to see a counselor. *The Couns Psychol*. 2003; 31:343–361.
- Klosterkötter J, Hellmich M, Steinmeyer EM, Schultze-Lutter F. Diagnosing schizophrenia in the initial prodromal phase. *Arch of Gen Psychiatry*. 2001; 58:158–164. [PubMed: 11177117]
- Lemos S, Vallina O, Fernández P, Ortega JA, García P, Gutiérrez A, Bobes J, García A, Miller. Predictive validity of the Scale of Prodromal Symptoms(SOPS). *T Actas Esp Psiquiatr*. 2006; 34(4):216–23.
- Li H, Seidman L. Engaging Asian American youth and their families in quality mental health services. *Asian J Psychiatry*. 2010; 3:169–172.
- Lin KM, Inui TS, Kleinman AM, Womack WM. Sociocultural determinants of the help-seeking behavior of patients with mental illness. *J Nerv Ment Dis*. 1982; 170:78–85. [PubMed: 7057173]
- Masuda A, Boone MS. Mental health stigma, self-concealment, and help-seeking attitudes among Asian American and European American college students with no help-seeking experience. *Int J Adv Couns*. 2011; 33:266–279.
- McGlashan TH, Zipursky RB, Perkins D, Addington J, Miller T, Woods SW, Hawkins KA, Breier A. Randomized, double-blind trial of olanzapine versus placebo in patients prodromally symptomatic for psychosis. *Am J Psychiatry*. 2006; 163:790–799. [PubMed: 16648318]
- McGlashan, TH.; Walsh, BC.; Woods, SW. *The psychosis-risk syndrome: handbook for diagnosis and follow-up*. New York: Oxford University Press, Inc.; 2010.
- Miller TJ, McGlashan TH, Rosen JL, Somjee L, Markovich PJ, Stein K, et al. Prospective diagnosis of the initial prodrome for schizophrenia based on the Structured Interview for Prodromal Syndromes: preliminary evidence of interrater reliability and predictive validity. *Am J Psychiatry*. 2002; 159:863–865. [PubMed: 11986145]
- Miller TJ, McGlashan TH, Woods SW, Stein K, Driesen N, Corcoran CM, et al. Symptom assessment in schizophrenic prodromal states. *Psychiatry Quarterly*. 1999; 70:273–287.
- Mueser, KT.; Glynn, SM. *Behavioral Family Therapy for Psychiatric Disorders*. Second. Oakland New Harbinger: 1999.
- Niendam TA, Bearden C, Zinberg J, Johnson JK, O'Brien M, Cannon TD. The course of neurocognition and social functioning in individuals at ultra high risk for psychosis. *Schizophrenia Bull*. 2007; 33:772–81.
- Pearson V. Families in China: An undervalued resource for mental health. *J Fam Ther*. 1993; 35:163–185.
- Preti A, Cella M. Randomized-controlled trials in people at ultra high risk of psychosis: a review of treatment effectiveness. *Schizophr Res*. 2010; 123:30–36. [PubMed: 20727717]
- Ruhrmann S, Schultze-Lutter F, Salokangas RK, Heinimaa M, Linszen D, Dingemans P, Birchwood M, Patterson P, Klosterkötter J. Prediction of psychosis in adolescents and young adults at high risk: results from the prospective European prediction of psychosis study. *Arch Gen Psychiatry*. 2010; 67:241–51. [PubMed: 20194824]
- Ryder AG, Bean G, Dion KL. Caregiver responses to symptoms of first-onset psychosis: a comparative study of Chinese-and Euro-Canadian families. *Transcult Psychiatry*. 2000; 27:225–236.

- Ryder AG, Bean G, Dion KL. Caregiver responses to symptoms of first-onset psychosis: A comparative study of Chinese and Euro-Canadian families. *Transcult Psychiatry*. 2000; 37:225–235.
- Seidman LJ, Giuliano AJ, Meyer EC, Addington J, Cadenhead KS, Cannon TD, McGlashan TH, Perkins DO, Tsuang MT, Walker EF, Woods SW, Bearden CE, Christensen BK, Hawkins K, Heaton R, Keefe RS, Heinssen R, Cornblatt BA. North American Prodrome Longitudinal Study (NAPLS) Group Neuropsychology of the prodrome to psychosis in the NAPLS Consortium: relationship to family history and conversion to psychosis. *Arch Gen Psychiatry*. 2010; 67:578–88. [PubMed: 20530007]
- Sentell T, Shumway M, Snowden L. Access to Mental Health Treatment by English Language Proficiency and Race/Ethnicity. *J Gen Intern Med*. 2007; 22:289–293. [PubMed: 17957413]
- Shea M, Yeh CJ. Asian American students' cultural values, stigma, and relational self-construal: Correlates and attitudes toward professional help seeking. *J Ment Health Counseling*. 2008; 30:157–172.
- Sheikh S, Furnham A. A cross-cultural study of mental health beliefs and attitudes towards seeking professional help. *Soc Psychiatry Psychiatr Epidemiol*. 2000; 35:326–334. [PubMed: 11016528]
- Skeatem A, Jackson C, Birchwood M, Jones C. Duration of untreated psychosis and pathways to care in first-episode psychosis: Investigation of helpseeking behaviour in primary care. *Brit J Psychiat*. 2002; 181:73–77.
- Sue DW. Asian-American mental health and help-seeking behavior: Comment on Solberg et al (1994), Tata and Leong (1994), and Lin (1994). *J Couns Psychol*. 1994; 41:92–295.
- Ting JY, Hwang WC. Cultural influences on help-seeking attitudes in Asian American students. *Am J Orthopsychiatry*. 2009; 79:125–132. [PubMed: 19290732]
- U.S Department of Health and Human Services. Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General. U.S. Department of Health and Human Services, Public Health Service Office of the Surgeon General; Rockville, MD: 2001b.
- Wong C, Davidson L, Anglin D, Link B, Gerson R, Malaspina D, McGlashan T, Corcoran C. Stigma in families of individuals in early stages of psychotic illness: family stigma and early psychosis. *Early Interv Psychiatry*. 2009; 3:108–115. [PubMed: 19777087]
- Wynaden D, Chapman R, Orb A, McGowan S, Zeeman Z, Yeak S. Factors that influence Asian communities' access to mental health care. *Int J Ment Health Nursing*. 2005; 14:88–95.
- Yang LH, Phillips MR, Lo G, Chou Y, Zhang X, Hopper K. “Excessive thinking” as explanatory model for schizophrenia: Impacts on stigma and “moral” status in Mainland China. *Schizophrenia Bull*. 2010; 36:836–845.
- Yang LH, Wonpat-Borja AJ, Opler MG, Corcoran CM. Potential stigma associated with inclusion; of the psychosis risk syndrome in the DSM-V: an empirical question. *Schizophr Res*. 2010; 120:42–48. [PubMed: 20399610]
- Yung AR, Yuen HP, McGorry PD, Phillips LJ, Kelly D, Dell'Olio M, Francey SM, Cosgrave EM, Killackey E, Stanford C, Godfrey K, Buckby J. Mapping the onset of psychosis: the Comprehensive Assessment of At-Risk Mental States. *Aust N Z J Psychiatry*. 2005; 39:64–971. Medline:16343296.
- Yung AR. Identification and treatment of the prodromal phase of psychotic disorders: Perspectives from the PACE Clinic. *Early Interv Psychiatry*. 2007; 1:224–235.
- Yung AR, McGorry PD, Woods SW. The initial prodrome in psychosis: descriptive and qualitative aspects. *Aust N Z J Psychiatry*. 1996; 30:587–599. [PubMed: 8902166]
- Zane, N.; Yeh, M. The use of culturally-based variables in assessment: Studies on loss of face. In: Kurasaki, KS.; Okazaki, S.; Sue, S., editors. *Asian American mental health: Assessment theories and methods*. New York, NY, US: Kluwer Academic/Plenum Publishers; 2002. p. 123-138.
- Zhang N, Dixon DN. Acculturation and attitudes of Asian international students toward seeking psychological help. *J Multicult Couns D*. 2003; 31:205–222.