



# Mending Minds

The early psychosis programs in Atlantic Canada offer to treat people at the very first signs of problems

By Jan Matthews  
Photography by Perry Jackson

**Anna** was visiting a friend in another city when strange things began to happen. She saw things that looked real, but later didn't seem real at all. She was so troubled by what she described as not feeling like herself that she woke her friend; together, they called Anna's parents. "She started to cry," says Anna's dad. "She was talking about things, but we didn't know where they were coming from."

A softspoken, pretty young woman, Anna returned home the next day. After picking her up at the airport, her parents noticed that Anna was doing things like stopping in front of posters and tracing all the letters. In the days that followed, Anna became afraid of talking on the phone. "I live on the phone," she says. "It was kinda weird." While watching television, she thought the actors were talking about her. Something was happening to Anna that was separating her from the world she once knew.

The family's doctor saw Anna immediately. His early diagnosis was a first episode of psychosis, signs of which include withdrawal from usual activities, a persistent decline in ability to handle everyday activities, anxiety, irritability, unusual or bizarre behaviour, attention problems. Although this sounds dire, if given a chance, the brain can often heal itself. The prognosis is promising if symptoms are treated early, a philosophy that programs in the Atlantic region are taking to heart.



### Who and when?

Psychosis strikes three in every 100 people, in every corner of the world, in every walk of life. Although the usual age range is 16 to 30, it can occur as early as 14 years of age.

### What else might it mean?

A first episode of psychosis can be a result of substance use, a side effect of medication, or a symptom of a medical condition, including bipolar disorder, post-partum depression and dementia. The only way to know what a first episode heralds is to watch what happens, and treat accordingly.

Nova Scotia Early Psychosis Program team members, from left to right, front row: Diana Bennett, Diane Piccott, Alisa Stevens, Dr. Zenovia Ursuliak, Jill Torraville. Back row: Dr. Heather Milliken, Margie Crown, Kim Good, Dr. Michael Teehan.

see people within the week. Nobody sits on a waiting list.

Instead, the intake person sets up an assessment appointment with a psychiatrist and nurse. Other members of the care team – psychologists, occupational therapists, social workers, an education coordinator – are involved as the need arises. The team gathers as much information as possible and starts to work on a treatment plan in conjunction with the client, and, in some case, with the family and friends.

Clients are offered medication, support, education, and cognitive-behaviour therapy. Since psychosis is a sign of a distressed brain, treatment generally begins there, with anti-psychotic medication. The research evidence suggests that the earlier people start anti-psychotics, the better their chances. Still, clients are bleak about medication. Because of their severe side effects, older antipsychotics, such as chlorpromazine, have not been used much for the past

That wasn't always the case. The prevailing view for many, many years was that no one recovered from psychosis, and if they did, they never had it in the first place. In the 1970s and '80s, attitudes started to shift. More effort and funding were going into research that explored the outcomes of earlier treatment, the mechanisms of psychosis, risk factors, causes. The best guess about cause is that it's an interaction between genetic vulnerability and environment, which might mean viral exposure during pregnancy, exposure to substances such as amphetamines, stress and so on. No matter the cause, researchers have found that early intervention improves the chances of full recovery from psychosis, a finding that clinicians are incorporating into their treatment approach.

Some regions have even built the approach into health policy. Nova Scotia, for instance, enacted a Standard of Care for Early Psychosis in 2004, laying out the importance of treating as soon as possible. Newfoundland and New Brunswick have taken the same approach, if not the policy route.

What that means is that in those three provinces, anyone with concerns about a first episode of psychosis can seek treatment without a referral, and get help quickly. In Halifax, the Nova Scotia Early Psychosis Program (NSEPP) sees people immediately. The Fredericton Mental Health Centre Early Prevention Program sees people within 48 hours. The St. John's Psychosis Intervention Early Recovery program, at Waterford Hospital, will

### Cannabis conundrum

Some of the people who call upon the health care system with symptoms of psychosis have recently used cannabis; a few are heavy cannabis users. Although this has led people to assert that cannabis causes psychosis, there is no evidence of that.

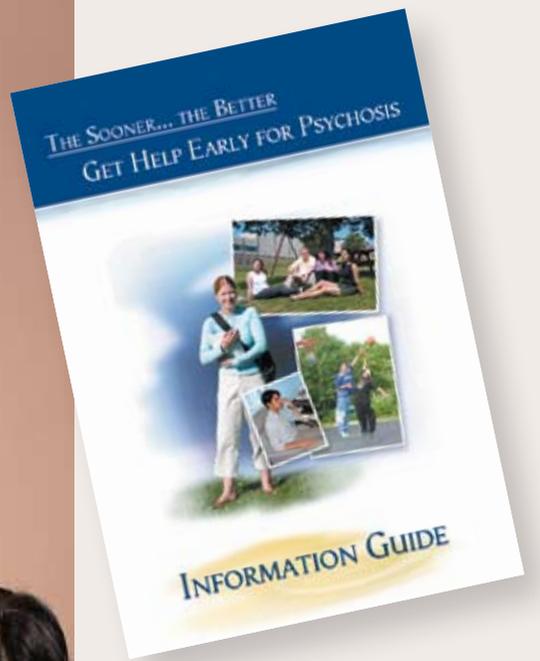
There is a connection, though. A UK team recently conducted a meta-analysis (an analysis of many studies) of cannabis research and concluded that use increases the risk of psychosis by approximately 40%. The greater the use, the greater the risk: upwards of 200%. These and other results suggest that, in some people, cannabinoid receptors aren't working properly, and that that problem is part of a larger problem. However, that remains a question.

What isn't a question is genetics. Since a great many people use cannabis, and only a few develop psychosis, researchers in the UK, US, Ireland, and New Zealand combined forces to look at genetic vulnerability. They found that people with a specific mutation of the gene catechol-O methyltransferase were most likely to have psychotic symptoms and to develop schizophrenia if they used cannabis. People without the specific structure were at no greater risk.

Since there is – as yet – no genetic test designed for at-home use, the best advice health care professionals can give people is to abstain, until 21, at least. That's when the brain finishes developing, and may not be as vulnerable to environmental assaults. -JM



Standing: Jill Torrville and Patricia Cosgrove.  
Seated: Margie Crown and Dr. Zenovia Ursuliak.



The NSEPP's educational booklet.

PEI manages early intervention through family doctors and hospital emergency room.

decade. The side-effect profile of the newer anti-psychotics – clozapine, olanzapine, quetiapine, and risperidone – is not as brutal, although there are still risks such as hyperglycemia (high blood sugar) and diabetes. “There is still no utopic medication,” says Dr. Zenovia Ursuliak, a staff psychiatrist with NSEPP.

Despite the kinder side-effect profile, compliance is often difficult. This is especially the case in the beginning, when the medication may not have begun to work. “Part of the illness is a lack of insight that they may need medication,” says Maureen Penny, the nurse coordinator for St. John’s PIER program. When the brain is chemically unbalanced, it takes a while to get it back on track. “It won’t happen overnight, which we had hoped would happen,” says Anna. Another client reassured Anna that she would return to her former self, having done so herself. That gave Anna the hope she needed to continue.

The medication worked. “Each week we could see a little bit of the old Anna shining through,” says her dad. Her mom saw Anna’s sense of humour returning. Anna herself realized she could talk on the phone again, for at least a few minutes. She was on her way back.

For families, the first intervention is education. Many parents, siblings and friends are deeply distressed and often blame themselves. At the NSEPP, education sessions cover what psychosis is, symptoms, causes, treatment, community

# When the brain is chemically unbalanced, it takes a while to get it back on track.

supports, and recovery. "Information is so key," says Margie Crown, education co-ordinator at NSEPP, "and people get support from each other. Everyone feels so isolated."

Clients begin the education sessions as early as possible. "If they're not stable, they can't take in information or talk about readiness," says Crown. "It's essential that everyone gets information on the illness, on what they can do to recover and help with the process. The goal is to manage the illness with a circle of support."

Once clients are able, cognitive-behaviour therapy is helpful. It teaches people how to channel thoughts and behaviours in a positive direction, including how to disregard hallucinations, and manage stress and any other concerns they may have. If willing and able, clients can attend group therapy. A wellness recovery program, which was piloted at the NSEPP under the direction of Dr. Ursuliak, is designed to help with the recovery phase. It includes healthy eating, exercise, stress management and the like. Given the side effects of the anti-psychotic medication, healthy lifestyle is vital, especially in combating the weight gain associated with some of the drugs. After going two years without another incidence of psychosis, clients can decide to stop taking medication. Whether they do or not,

they're encouraged to maintain contact with their family doctor, and to seek help quickly if anything goes awry.

But does this approach to psychosis make any difference? As laid out by policy, program evaluation is built into the NSEPP. Team members continually monitor program effectiveness by collecting physical health measures, depression symptoms, family reports and the like. According to recent findings, the majority of patients with first-episode psychosis were symptom-free at the one-year follow-up mark. There is as yet no data on how people are doing at five years or 10 years, although those studies are underway. Anna, for one, has recovered. She finished high school, went to culinary school and now works at a resort in the Atlantic provinces. "Life is great," she says, her eyes sparkling once again.

Attention recently has focused on people who are at high risk of psychosis, because of family history, a decline in functioning, and psychotic symptoms that come and go. "If there is a strong family history and some evidence of decline, it warrants an assessment at the very least," says Dr. Sabina Abidi, a child and adolescent psychiatrist who has a cross appointment to the NSEPP and the IWK Youth Psychosis Team. The hope is that support, education, cognitive-behaviour therapy, and



The NSEPP's Diane Piccott.

medication can be offered early enough to prevent, or at least delay, a first break. To identify what makes people vulnerable to psychosis, researchers at the IWK and the NSEPP are set to study young people who have sought help. Dr. Abidi says it's hard to say whether anxiety, depression and extreme distress are signs of vulnerability. "It depends on the individual case. We often see adolescents with such symptoms who do not develop a psychotic illness." Dr. Abidi is running a study of ultra high-risk people in Cumberland County; the study is one of the first research collaborations between the IWK and the Capital District Health Authority. Dr. Abidi's objective is to better understand what the pre-onset stage of psychosis looks like, and what helps prevent or delay it. "In five to 10 years, with similar research, we'll be better informed."

For more information about Anna and her family, as well as information about the NSEPP, go to [www.e-earlyphychosis.ca](http://www.e-earlyphychosis.ca)

## Not normal teenage stuff

The myth of teenage angst is that teenagers are supposed to be disturbed, and that this disturbance is normal. The idea began with Dr. G. Stanley Hall, a psychiatrist who loved opera, and borrowed from a Wagnerian concept when he wrote about the "storm and stress" of adolescence. Researchers in the 1960s, who set out to prove Dr. Hall right, found that most teenagers didn't experience substantial storm and stress. Only 15% to 20% of adolescents had problems such as social phobia, anxiety and depression, in response to stress. "Many of the mental disorders that onset in the teen years do not occur in response to an environmental event," says Dr. Stan Kutcher, professor of psychiatry at Dalhousie University and holder of the university's Sun Life Financial Chair in Adolescent Mental Health. "None occur due to the normal stresses and strains of being a teenager."

According to Dr. Kutcher, for most teenagers (60%), things go well. During adolescence, the brain renovates, getting rid of stuff (pruning back cells) and putting new things in (creating neural links). Although a disruption during this process can increase the risk of depression, psychosis, anxiety disorders, and anorexia nervosa, most teens develop smoothly. Dr. Kutcher says that because of the confusion created by this myth of teenage angst, family and friends may assume that disturbances are normal and ignore the health problems of someone they love. Emotional, psychological, developmental bumps, if they last any length of time, are signs of a distressed brain and call for medical attention. - JM