

The Australian Psychosis Research Network



Australia Leading the World



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OPEN MINDS The Australian Psychosis Research Network

The debilitating effects of schizophrenia and other psychotic disorders severely impact on the lives of over 200,000 Australians, their families and carers every day.

Each year almost 3,000 new cases of schizophrenia alone are diagnosed, the majority involving young people. Even with the most optimal of care, more than 70 percent of the disability is untreatable. The social burden is enormous and economic costs run into billions of dollars annually.

Through OPEN MINDS- The Australian Psychosis Research Network, Australia has a unique opportunity to launch psychosis research into a new era of discovery and position Australia as the world leader in this area.

Open Minds will provide strategic direction and a coordinated approach for a national program of clinical, neuroscience and genetic research into psychotic disorders.

Open Minds will create a virtual institute - one without walls - to unite Australia's neuroscience and clinical research community. It will be the largest scientific collaboration of its type in the world dedicated to bringing Australia closer to a cure for psychosis and providing a better understanding of how the brain works.

Social and Economic Costs of Psychosis

Severe mental illnesses such as schizophrenia and bipolar disorder are a major health concern. Their incapacitating effects are the third largest cause of disability (after alcohol and depression).

Psychotic disorders are biological diseases of the brain that usually strike young people aged 15-25 years. The crippling symptoms are typically lifelong and there is currently no known cause or cure.

Schizophrenia is one of the major causes of youth suicide in Australia - 30 percent of sufferers will attempt suicide and up to five percent will succeed.

Psychotic disorders are one of the most expensive disease groups to treat, with Australia outlaying around \$2.6 billion per annum in both direct and indirect health costs. The annual cost of treating a person with psychosis is approximately \$20,000 up to 20 times greater than for a person suffering from depression.

If we continue our efforts at the current pace, a cure for schizophrenia will be not be possible in

the foreseeable future. Over the next five years Australia will have:

- spent almost \$12 billion in health, welfare, and loss of productivity costs for psychosis;
- potentially lost over 600 lives from suicide alone; and
- another 15,000 schizophrenia sufferers and thousands more families and carers will be affected.

The associated problems such as unemployment, crime and substance abuse will continue to rise and place enormous stress and demand on current and future support services.

The establishment of OPEN MINDS will provide the solutions needed to help win the battle against the onset and tragic consequences of psychotic disorders.

Impact on Parents and Care Providers

Young people rarely approach people unfamiliar to them to discuss mental health problems.

The trusted relationships young people forge with family, friends, and adults at schools are those networks through which they seek out help and guidance.

When a young person begins to show the signs of mental illness (such as unexplained medical symptoms, school or social avoidance) they can be perceived as disruptive or non-compliant, but in reality may be in the early stages of developing mental health problems.

Although parents, friends and school teachers are usually the first to notice changes in a young person's behaviour, they often do not have the qualifications or knowledge to identify what should be done about it.

These 'symptoms' or behaviours can be further compounded by the discomfort of families and carers at the prospect of having to access mental health services, or even in coming to terms with the fact there may be something psychiatrically wrong with a young person in their care.

International research suggests that helping young people identify early warning signs and suggesting ways of seeking assistance is essential. A combination of prevention and early intervention, together with a shared approach across agencies is crucial in the long-term wellbeing of young people with mental illness and their families.

OPEN MINDS will actively engage parents, carers, clinicians, policy-makers and the general public to discover ways to improve the short, medium and long-term outcomes for young people and their families.

Psychosis and Cannabis Use

Cannabis use among young people aged 14-25 with mental or emotional problems is estimated to be as high as 60 percent.

Research indicates that cannabis is a causal factor in the development of psychosis. There is also considerable evidence to suggest that it can contribute to the development of a serious mental illness, such as schizophrenia in a young person with a genetic predisposition.

Often, many young people turn to cannabis as a form of self-medication to alleviate the symptoms associated with their illness.

However, cannabis use has a disastrous and detrimental effect. A young person's symptoms of severe paranoia, delusions, hallucinations, anxiety and depression can be more acute and prolonged when 'high' on cannabis. This may lead to suicidal or risk-taking behaviours, such as multiple drug use and dangerous driving.

Furthermore, young people who use cannabis frequently and who suffer from mental health problems spend more time in hospital than non-users and their illness relapse rate is much higher.

Research linking psychosis and cannabis use is fragmented and inconclusive. Through OPEN MINDS, local and international research can be brought together so Australian scientists can study this area more meticulously.

Australia at the Cutting Edge

Schizophrenia and associated mental health disorders are regarded as the toughest diseases in the world to treat - Australia has the ideal scientific environment to establish a unique, integrated virtual research facility to aid in fast-tracking a cure.

Currently, Australia has world renowned research centres in neurosciences and genetics, leading psychosis research groups and high quality neuroimaging centres.

Significant research outcomes are now emerging from the following centres:

- Queensland Centre for Mental Health Research (QCMHR)
- ORYGEN Youth Health in Victoria
- Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD)
- Melbourne Neuropsychiatry Centre (MNC)
- The Centre for Clinical Research in Neuropsychiatry (CCRN)
- Mental Health Research Institute of Victoria (MHRI)
- Alfred Research Centre
- Prince of Wales Medical Research Institute (POWMRI)

Australia's only research institute dedicated solely to schizophrenia research, the Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD), has provided the model for a national network. The key achievements to date include:

- significantly increased schizophrenia research collaborations with scientists and institutions from Australia and worldwide;
- the establishment of critical world-class research infrastructure:

The Schizophrenia Research Register;

The NSW Tissue Resource Centre, and '*Gift of Hope*' Tissue Donor Program;

The DNA Bank for Schizophrenia Research; and

The Virtual Brain Bank.

To ensure Australian scientists and clinicians maintain their highly regarded international reputation, OPEN MINDS will create the infrastructure needed to secure their contributions so they can continue to participate on the global cutting edge of psychosis research.

The Timing is Right

Australian scientists have never been closer to a breakthrough. This is because the range of sophisticated scientific technologies needed to understand psychotic disorders has recently become available.

Significantly, in the last two years the situation has changed radically with the identification of eight to ten relevant genes. Now the prospect of finding a cure for psychosis is rapidly becoming science fact - not science fiction. As a community we have an obligation to use this technology and knowledge and apply it systematically to the study of psychotic disorders.

Right now, Australia has an opportunity through the establishment of OPEN MINDS to change how these diseases are treated and importantly, set Australia on the path to discovery and recovery.

Making a Profound Difference

OPEN MINDS represents a comprehensive virtual approach - from gene to therapy.

It has three strategic aims:

- build pathways for discovery across each level of research expertise and resource;
- achieve critical mass within each level of research expertise by establishing collaborations between research centres across institutions and across State, Territory and International borders; and
- actively engage consumers and carers, clinicians, policy-makers, and the general public in the promotion and development of psychosis research.

In the **short term** OPEN MINDS will:

- launch and maintain a collaborative network of scientists across Australia; and
- establish coordinated multidisciplinary research programs aimed at discovering the causes of, and the means to prevent and cure, psychotic disorders.

In the **medium term** OPEN MINDS will:

- establish links between genetic factors and causally significant subtypes of psychosis;
- rapidly assess new treatment possibilities in animal and pre-clinical studies; and
- encourage Australian commercialization opportunities for new discoveries.

In the long term OPEN MINDS will:

- identify currently unknown molecular targets for therapeutic and preventative intervention; and
- improve affordability of future high cost treatments via Australian partnership in their development.

This document has been produced by NISAD Schizophrenia Research on behalf of all participating organisations in the OPEN MINDS Australian Psychosis Research Network. Enquiries contact: (02) 9295 8407