



SCHIZOPHRENIA Factsheet

March 2019

What are hormones?

Hormones are chemical messengers secreted by the endocrine glands. Hormones travel through the bloodstream to tissues and organs, and control most of the body's major systems including heart rate, metabolism, mood, sexual function, and growth and development.

The hormone oestrogen has been proposed to confer a protective effect for schizophrenia. Women generally have a later onset of schizophrenia than males, with an increased risk after menopause (see the risk factor topic on sex differences). Oestrogen levels drop over time, particularly with the onset of menopause. This protection may also mean that pre-menopausal women who develop schizophrenia may experience a less severe illness than males.

Prolactin is another hormone implicated in schizophrenia. It is a polypeptide secreted by the pituitary gland, and is involved in many biological functions such as reproduction, pregnancy and lactation, and growth and development. Some medications, such as antipsychotics are among the factors that can affect blood prolactin concentrations. Increased prolactin (hyperprolactinemia) is associated with a variety of adverse effects, including risk of breast cancer, lack of menstruation, and early osteoporosis in women, and a lack of libido and erectile function in men.

What is the evidence for hormonal changes in people with schizophrenia?

Moderate quality evidence suggests a large increase in prolactin levels in antipsychotic-naïve males with schizophrenia and a medium-sized increase in antipsychotic-naïve females with schizophrenia.

For more information see the technical table



NeuRA

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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate/schizophrenia.