Predicting the future course of psychotic illness

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University of Adelaide psychiatry researchers have developed a model that could help to predict a patient's likelihood of a good outcome from treatment – from their very first psychotic episode.

The model is based on a range of factors, including clinical symptoms, cognitive abilities, MRI scans of the brain's structure, and biomarkers in the patient's blood.

Speaking in the lead up to Mental Health Week (5-12 October), the University's Head of Psychiatry, Professor Bernhard Baune, says the model is a revolutionary idea for psychiatric care, and is aimed at improving treatment for people suffering from mental illnesses such as schizophrenia. He says the model is applicable to other types of mental illnesses as well.

"Being able to predict the trajectory of psychotic illness is a kind of 'holy grail' in psychiatric medicine," says Professor Baune, who is corresponding author of a paper on the new model, to be published in the *Australian & New Zealand Journal of Psychiatry*. Professor Baune will also present this work at the European Congress of Neuropsychopharmacology in Berlin, Germany this month.

"There is no doubt that our model will be challenging for many in the profession. However, we believe this will improve our understanding of the course of an illness, and lead to a more personalised and specialised approach to the assessment and treatment of people presenting with their

first psychotic episode."

Professor Baune says the model builds on a decade of research in this field, and a review and reinterpretation of the relevant studies to date. "Individual illness progression is dependent on a wide range of factors, including sociodemographic, clinical, psychological and biological. These are complex issues, and data on all of them is required in order to model the trajectory of the illness," he says.

"Our model shows that the probability of achieving long-term favourable or unfavourable outcomes can differ significantly depending on the information we have within the first six months of the onset of the disease."

Professor Baune says the use of such a model raises a number of ethical dilemmas: "Should a patient be offered a rigorous treatment right away at the beginning of the disease that, according to current treatment guidelines, is only offered at later stages after years of disease progression? Or should certain treatments be denied if evidence suggests that the course of the illness will be mild or that they will do little for the patient's outcome? These are just some of the questions this work raises, which should be discussed and debated by the profession.

"As with all novel clinical approaches, the use of this model in practice will require rigorous testing. And we would be the first to caution that a tool such as this could ever replace a good quality, empathic treatment relationship with a patient."

Provided by University of Adelaide