

## THE METABOLIC SYNDROME IN UNTREATED SCHIZOPHRENIA PATIENTS: PREVALENCE AND SUGGESTED MECHANISMS

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The Metabolic Syndrome (MetS) is a constellation of markers which often coexist in patients, each representing an increased risk of developing cardiovascular disease. It is established that the prevalence of MetS among schizophrenic patients is greatly increased compared to the general population. This effect is mostly attributed to use of atypical antipsychotic medications, however questions also exist over whether schizophrenia itself can contribute more directly to metabolic dysfunction. . Indeed metabolic disturbances were common in mental illness as early as 1879, many years before the implementation of antipsychotic medications.

We evaluated the link between MetS and schizophrenia which is independent of antipsychotics, by conducting a systematic literature search of Pubmed (2002-2012) for studies of drug-naive and first episode patients. 12 papers met our criteria, from which 893 patients were evaluated. An average prevalence of MetS across these studies was 10.8%. We found that there are very few data to suggest that the incidence of MetS is increased in first episode and drug naive adult patients with schizophrenia. It appears , however, that schizophrenia does increase some components of MetS, such as diabetes.

Many contributory mechanisms have been proposed for the observed metabolic dysregulation in schizophrenic patients. There include hypothalamic-pituitary axis dysfunction, sympathetic nervous system dysfunction, proinflammatory states and several genetic mutations, however much controversy exists in this area.

There is a huge cardiovascular burden on schizophrenic patients, accounting for 50% of natural excess deaths. It is crucial, therefore, to establish the causes and optimal management of MetS in schizophrenia.