**Proportion of Metabolic Syndrome among Schizophrenic Patients Receiving Antipsychotics at Chitwan Medical College, Chitwan, Nepal**

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**Background**

Schizophrenia has been associated with an increased risk of cardio-metabolic morbidity and mortality. Metabolic syndrome and other cardiovascular risk factors are highly prevalent in schizophrenic patients. Over recent years, treatment with antipsychotic agents has been recognized as additional risk factors of development of metabolic syndrome in schizophrenic patients. Antipsychotics are in wide used for the treatment of schizophrenic patients in our country but no published data exist on the prevalence of metabolic syndrome in Nepalese schizophrenic patients.

**Methods**

Cross-sectional analytical study design was used to find out the proportion of metabolic syndrome among schizophrenic patients receiving antipsychotics from the Psychiatric OPD of Chitwan Medical College Teaching Hospital (CMC-TH). A total of 85 schizophrenic patients were selected for the study by using random sampling technique. Data were collected by using semi-structured interview schedule, physiological measurement and record review. Obtained data were entered in SPSS version 19.0 and analyzed by using descriptive and inferential statistics. The presence of metabolic syndrome was assessed according to International Federation of Diabetes (IFD) definition criteria based on gender specific. Findings were presented in different tables.

**Results**

Among 85 schizophrenic patients receiving antipsychotics, 24.7% of patients had metabolic syndrome according to IDF criteria. The most common metabolic syndrome parameters in patients were central obesity (64.7%), elevated fasting glucose (54.1%), hyper triglyceridemia (44.7%), and low HDL cholesterol (18.8%) while the least prevalent metabolic parameter was elevated blood pressure 4 (4.7%). We found a statistically significant difference in all metabolic syndrome parameters, except HDL cholesterol, between patients in the metabolic syndrome and non-metabolic syndrome groups. Atypical antipsychotics were commonly used in both the metabolic and non-metabolic syndrome patients (76.2% vs 75.0%) and proportion of metabolic syndrome was higher in patients receiving atypical antipsychotics in compared to patients prescribed with typical antipsychotics (25.0% vs 23.8%). Relatively more women than men have metabolic syndrome (31.1% vs 17.5%), but this did not reach statistical significance (p=0.146). There was significant relationship between metabolic syndrome with age (p=0.009), education (p=0.048), occupation (p=0.025), body mass index (p=0.013) and duration of treatment with antipsychotics (p=0.025) whereas there was no relationship between metabolic syndrome with type of antipsychotic drugs (p=0.913), drugs (p= 0.757), tobacco use (p= 0.591), type of food (p= 0.972), habit of exercise (p= 0.568) and ethnicity (p= 0.268)

**Conclusions**: Metabolic syndrome is high in schizophrenic patients who are receiving antipsychotics for their treatment. Therefore treating physicians and health workers need to monitor metabolic syndrome parameters regularly, intervene appropriately when needed and refer the patients for the treatment of any other physical illness/es.

**Keywords:** antipsychotics; metabolic syndrome; schizophrenic patients.