# SURVEY ON SCREENING FOR METABOLIC SYNDROME PARAMETERS FOR PATIENTS ON ANTIPSYCHOTIC TREATMENT IN AN ACUTE ADULT PSYCHIATRIC UNIT IN ENGLAND

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# **INTRODUCTION**

Metabolic syndrome is a cluster of disorders comprising obesity, dyslipidaemias, glucose intolerance, insulin resistance and hypertension<sup>1</sup>. It helps identify individuals at high risk of both type 2 diabetes and cardiovascular disease (CVD)<sup>2</sup>. There is considerable evidence to show that patients prescribed antipsychotic drugs are at increased risk of developing Metabolic Syndrome<sup>3</sup>. It has been recommended to screen and monitor metabolic parameters to manage risk in this population<sup>4</sup>. This snapshot case note survey was carried out to evaluate the practice of screening for Metabolic Syndrome parameters for patients admitted to Berrywood Hospital who were prescribed antipsychotic drugs in January 2009.

# SUBJECTS AND METHODS

#### Sample

40 patients admitted to acute adult psychiatric wards at Berrywood Hospital and receiving treatment with antipsychotic medications.

#### **Data collection**

The data was collected on patients' demographics (age, gender and ethnicity), current antipsychotic medication, baseline recording of weight, height and Body Mass Index (BMI), fasting and random blood glucose levels, Serum Triglycerides, Cholesterol and HDL-C.

# RESULTS

The age range of the patient was from 18 to 73 years.

#### **Gender distribution**

The total number of the patients in the sample was forty. Twenty three patients were male (57.5%) and seventeen female (43.5%). (Fig 1).

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#### Ethnicity

36 (90%) patients were white, 1(2.5%) patient was of mixed heritage. 2(5%) patients were black and the ethnicity of 1 (2.5%) patient was not recorded. (Fig. 2).





#### Antipsychotic medication

22 (55%) patients were prescribed atypical antipsychotics; of them 10(25%) were prescribed olanzapine and 12 (30%) patients were prescribed other atypical antipsychotics. 5(12.5%) patients were prescribed typical antipsychotics and 13 (32.5%) patients were prescribed more than one antipsychotic. (Fig. 3).



Fig 3: Antipsychotic Medication

#### Metabolic syndrome parameters

2(5%) patients had their BMI recorded. 12(30%) patients had their weight recorded. 9(22.5%) patients had their height recorded. 34(85%) had their BP recorded. (Fig. 4).



Fig 4: Metabolic syndrome parameter 1

12(30%) patients had their Blood sugar level recorded. Fasting blood glucose was recorded in 5(12.5%) patients. Random blood glucose was recorded in 7(17.5%) patients. 11(27.5%) patients had their serum Triglycerides recorded. 9 (22.5%) patients had their serum Cholesterol recorded. No patients had their HDL-C recorded. (Fig. 5).



Fig 5: Metabolic syndrome parameter 2

## DISCUSSION

This study revealed that 55% of the sample patients were prescribed one atypical antipsychotics, most frequently olanzapine which is associated with substantial weight gain and the development of dyslipidaemia<sup>5</sup>. 32.5% of the sample patients were receiving more than one antipsychotic. Although baseline weight and height were recorded in 30% and 22.5% respectively.BMI was calculated for only 5% of the sample patients. The vast majority had their baseline BP recorded (85%). Blood glucose levels (random or fasting) were recorded for 30% of the sample patients. Serum Triglycerides and Cholesterol were recorded for 27.5% and 22.5% of the sample patients respectively. Significantly, no patients had their HDL-C recorded.

#### CONCLUSION

The practice of screening for Metabolic Syndrome parameters for the in-patients prescribed antipsychotic medications was inadequate. Improving this practice would increase the chance of detecting and treating risk factors for cardiovascular disease and diabetes. Following this survey, it was recommended that a checklist for Metabolic Syndrome parameters should be implemented.

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