Weight and metabolic changes in early psychosis: Association with daily quantification of medication exposure during the first hospitalization

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Contrary to prescription habits and insurance policies, clinicians should be especially cautious in prescribing metabolically problematic antipsychotics to people with normal to low baseline BMI.

Background:
In contrast to other medical fields, the mortality gap in psychiatry keeps increasing. 1 To minimize cardiovascular comorbidities, the main cause of mortality in SMI, we need to better understand and minimize the impact of antipsychotic (AP) medications on weight gain.2

Study design and methods:
Setting:
Ten inpatient psychiatric wards in Czech Republic
Inpatient setting allowed us to maximize adherence, standardize other lifestyle factors and precisely quantify daily exposure to medication.

Participants:
173 individuals admitted for their first hospitalization for psychosis (FEP)
204 healthy controls

Main findings:
- Daily or cumulative exposures to olanzapine, clozapine or quetiapine were associated with weight gain in FEP, but only in those with low to healthy BMI, Figures 1, 2.
- Type of antipsychotic was not associated with baseline BMI
- Weight gain in people with initially healthy BMI was concerning, as:

  a) almost 1/2 of these individuals experienced clinically significant weight gain, Figure 3
  b) within an average of 39 days of medication use, people with initially healthy BMI were indistinguishable from initially overweight/obese individuals in metabolic markers (HDL, TGC, FT3, FT4)

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Figure 1
Figure 2
Figure 3