Can obese patients on antipsychotic medications achieve weight loss in an unmodified general population lifestyle-intervention weight management programme?

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Background
Antipsychotics (APs) are associated with significant weight gain (>7%) in 78.8% of patients. This causes serious implications on the physical and mental well-being of the patients with serious mental illnesses (SMIs). It also increases the risks for T2DM, CHD, stroke, some cancers and doubles the risk of all-cause mortality. The challenges faced by these patients include executive dysfunction which impedes learning, poor access to healthy food, physical inactivity and poor diet. They also have difficulties adhering to and participating in behaviour modification programmes. Therefore, studies examining the effect of potential weight-reducing interventions very often excluded patients with SMIs.

Objective
To establish the weight outcomes of obese patients on APs enrolled into an unmodified multidisciplinary weight management programme not tailored to manage patients with SMIs.

Hypothesis
Weight change is similar in patients taking APs to that of patients not taking APs when enrolled into an unmodified multidisciplinary weight management programme.

Methods
Case-Control Study on patients attending the Weight Management Service (WMS) in St. Columcille’s Hospital, Dublin.

Each patient on APs is matched for age, gender and BMI with 2 WMS patients not taking APs (matched cohort). 4 excluded. Severe Obesity Patients (n=88)

Results

<table>
<thead>
<tr>
<th>Parameters</th>
<th>APs (n=44)</th>
<th>Matched Cohort (n=88)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>44.4 (40.7-48.2)</td>
<td>44.3 (41.7-46.8)</td>
<td>0.898</td>
</tr>
<tr>
<td>BMI, kg/m²</td>
<td>49.1 (46.0-52.3)</td>
<td>48.9 (46.8-51.1)</td>
<td>0.866</td>
</tr>
<tr>
<td>Male, n (%)</td>
<td>17 (38.6)</td>
<td>22 (36.4)</td>
<td>0.799</td>
</tr>
<tr>
<td>T2DM, n (%)</td>
<td>13 (29.5)</td>
<td>22 (25.0)</td>
<td>0.577</td>
</tr>
<tr>
<td>Follow-up, months</td>
<td>15.3 (11.1-19.5)</td>
<td>11.4 (9.9-12.8)</td>
<td>0.687</td>
</tr>
<tr>
<td>Attendances, n</td>
<td>6.8 (5.5-7.7)</td>
<td>6.5 (5.9-7.1)</td>
<td>0.622</td>
</tr>
<tr>
<td>Medical Illnesses, n</td>
<td>3.6 (2.9-4.3)</td>
<td>2.3 (1.9-2.7)</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Data are expressed as mean (95% confidence interval) or numbers (percentages) for dichotomous variables. P values determined using the independent-samples Mann-Whitney U or the Chi-Square test.

Conclusion
Lifestyle interventions effect similar weight change in those taking APs as those not taking APs medications.

Individuals with SMIs were willing to attend, and benefited from a WM program that focused on nutrition, exercise and motivation.

It is feasible to run a WM program unmodified to accommodate obese patients maintained on APs in the community.

References