Improving Metabolic Health in Patients with Severe Mental Illness

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BACKGROUND

Patients with severe mental illness are at increased risk for obesity and obesity-associated metabolic disorders, including type 2 diabetes, dyslipidemia, and hypertension (1). Unfortunately, certain antipsychotic medications used to treat these patients may promote weight gain and obesity-associated diseases (2, 3). Recent guidelines have emphasized screening patients on antipsychotic medications with fasting glucose and lipid measurements; however, adherence has been poor. For example, a recent study found that only 27% had testing for glucose and 10% for lipids prior to starting antipsychotic therapy (4).

To improve the health of their patients, the San Mateo County Behavioral Health and Recovery Services (BHRS) have started to provide primary care services directly within the psychiatric clinics through a nurse practitioner. The objective of this study was to evaluate the effectiveness of this program in screening and managing mental-health patients for common metabolic abnormalities.

COMMUNITY PARTNER

The San Mateo County Behavioral Health and Recovery Services (BHRS) serve individuals with or at risk of alcohol and drug addiction and mental health challenges. Their mission is to achieve wellness and/or recovery through partnership, innovation, and excellence. Their leadership welcomes opportunities to partner with academic institutions to improve the health of their patient population.

REFERENCES


PROJECT DESCRIPTION

The objectives of our study were two-fold: 1. To evaluate the effectiveness of primary care services within the psychiatric clinic in screening patients with mental health illness treated or not treated with antipsychotic medications with fasting glucose and lipid panel compared with national averages. 2. To build an academic-community relationship between the Stanford University and San Mateo BHRS.

To accomplish our goals, we completed chart reviews of 180 patients consecutively seen by a single nurse practitioner who manages primary care needs within the psychiatric clinic. In addition to weight and past medical history, we assessed testing for fasting glucose and lipid panel within the past year. Statistical analyses were performed using SPSS (version 16).

OUTCOMES

Baseline Characteristics

<table>
<thead>
<tr>
<th></th>
<th>No Antipsychotics</th>
<th>Yes Antipsychotics</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>52</td>
<td>128</td>
</tr>
<tr>
<td>Age (years)</td>
<td>47 ± 12</td>
<td>48 ± 11</td>
</tr>
<tr>
<td>Gender (male)</td>
<td>20 (39%)</td>
<td>76 (69%)</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>21 (41%)</td>
<td>49 (38%)</td>
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<tr>
<td>Psychiatric Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>2 (4%)</td>
<td>86 (67%)</td>
</tr>
<tr>
<td>Bipolar</td>
<td>6 (15%)</td>
<td>10 (8%)</td>
</tr>
<tr>
<td>Psychiatric Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atypical only</td>
<td>0</td>
<td>81 (63%)</td>
</tr>
<tr>
<td>Typical only</td>
<td>0</td>
<td>19 (15%)</td>
</tr>
<tr>
<td>Both Atypical and Typical</td>
<td>0</td>
<td>28 (22%)</td>
</tr>
</tbody>
</table>

1. Providing primary care in psychiatric clinics can enhance screening for common metabolic abnormalities.
2. A majority (79%) of patients with severe mental illness are either overweight or obese.
3. In this select population, obesity-associated metabolic abnormalities are common regardless of use of antipsychotic medications.
4. Screening for metabolic abnormalities should be provided to all patients with severe mental illness.
5. Community partnerships are rewarding avenues to translate research. To enhance productive relationships, there should be shared interests, a focused project, designated community contact and regularly scheduled meetings.

ACKNOWLEDGEMENTS

We would like to thank the Office of Community Health for providing support and funding through the Translational Science Award Seed grant.

OUTCOMES

SCREENING BY MEDICATION STATUS

- Glucose
- Lipid

- P=0.004
- P=0.002

LESSONS LEARNED

1. To compare care of patients in psychiatric clinics with and without in-house primary care service.
2. To enhance screening of metabolic abnormalities for all patients by conducting medical and laboratory assessments at initial psychiatric intakes.

RECOMMENDATION

Future objectives:

1. To enhance screening of metabolic abnormalities for all patients by conducting medical and laboratory assessments at initial psychiatric intakes.