Physical Health Profiles of Western Canadian Forensic Psychiatric Inpatients
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Background

- Patients with severe mental illnesses often have significant primary care needs. A high burden of disease – especially cardiovascular, metabolic, and respiratory conditions – contributes to substantial reduction in life expectancy for these individuals (Haddad et al., 2016).
- This disparity likely reflects lifestyle factors (Osborn et al. 2007), antipsychotic medication (De Hert et al. 2012), and broader societal factors (Evans-Lacko et al. 2012).

Objectives

- To describe primary care needs of a sample of inpatient forensic psychiatric patients.
- To compare and contrast the needs of patients referred for assessment versus treatment patients.

Methods

- **Sample.** N = 100 forensic psychiatric inpatients in a large forensic psychiatric hospital in Western Canada were purposefully sampled to reflect the hospital cohort by gender (91% male), length of stay (11% considered “long stay”), and legal status (41% NCRMD). Patients were categorized as either “Assessment” patients (e.g. hospitalization by court-ordered assessment for mental illness), or “Treatment” patients (e.g. persons found unfit to stand trial by the court and housed in hospital to receive treatment until fit, people found NCRMD).
- **Procedure.** File reviews were conducted by nurses and RAs as part of a hospital patient needs assessment. The data collection protocol was informed by prior models and extant literature; direct care providers at the hospital were also consulted.
- **Sources of Information.** Information about medical diagnoses, body metrics, and lifestyle factors was collected from clinical files and administrative hospital data over a 3-month study period.
- This study was approved by UBC RISE and BCMHSUS Research Advisory Committees.

Conclusions

These findings confirm prior research demonstrating that substantial physical health challenges are common among forensic inpatients. Treatment patients tended to have higher documented levels of somatic comorbidities than assessment patients, and many of the “treatment” comorbidities are associated with antipsychotic medication use and/or lifestyle-related factors (De Hert et al., 2012, Osborn et al., 2007). Treatment patients were also more likely to have a documented height and weight that classifies them as having obesity. It is possible that treatment patients have been in custody longer and less active. However, due to the small sample sizes and issues with documentation (e.g. staff may have less time or incentive to document physical health needs of assessment patients), further research is required to determine if these two groups (assessment and treatment patients) are truly different. This population may benefit from further cross-sectional or cohort studies with larger sample sizes and increased levels of documentation to determine whether these health-related disparities are truly attributable to patients’ status as “assessment” or “treatment.”

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Table 1:
Top 5 Comorbidities among Assessment and Treatment Patients

<table>
<thead>
<tr>
<th></th>
<th>Assessment (n, %)</th>
<th>Treatment (n, %)</th>
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</thead>
<tbody>
<tr>
<td>Chronic pain (4, 13%)</td>
<td>Obesity (10, 15%)</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C (2, 6%)</td>
<td>Diabetes (8, 12%)</td>
<td></td>
</tr>
<tr>
<td>Hypertension (2, 6%)</td>
<td>Gastric condition (7, 10%)</td>
<td></td>
</tr>
<tr>
<td>Skin condition (2, 6%)</td>
<td>Dyslipidemia (5, 7%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hepatitis C (5, 7%)</td>
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</tbody>
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Figure 1:
Comorbidity Prevalence among Assessment and Treatment Patients

The two above charts show the proportions of the “assessment” and “treatment” sample with differing levels of physical comorbidities. About 25% of the individuals within the “assessment” sample had 2 or 3+ comorbidities, while about 33% did within the “treatment” sample.

Figure 2:
BMI Category Distribution: Assessment and Treatment Patients

The above charts show proportions of BMI-related categories within the “assessment” and “treatment” samples. A significant number of assessment patients held a "healthy weight", whereas a very large proportion of the “treatment” sample would be considered to have obesity. A large proportion of patients did not have either their height or weight documented, therefore a BMI was unable to be calculated.

* Within study timeframe

Table 2:
BMI Category Distribution: Assessment and Treatment Patients

<table>
<thead>
<tr>
<th></th>
<th>Assessment (n, %)</th>
<th>Treatment (n, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Obesity (BMI&lt;30)</td>
<td>15, 47%</td>
<td></td>
</tr>
<tr>
<td>Obesity (BMI&gt;30)</td>
<td>23, 34%</td>
<td></td>
</tr>
<tr>
<td>Not Documented*</td>
<td>29, 43%</td>
<td></td>
</tr>
</tbody>
</table>

* Within study timeframe

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