Are FEP services successful at engaging young immigrants in treatment?

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Introduction

Immigration is a well-recognized risk factor for psychosis (RR 2.3 1st generation, RR 2.1 2nd generation) 1 and many studies suggest that immigrants use fewer mental health services 2,3. A Canadian study found that specific ethnocultural groups are much less likely to use any mental health services (immigrants 5.5% vs non-immigrants 14.7%); how recently they immigrated had no significant effect 4.

Ethnic variations in use of specialist mental health services for patients with schizophrenia are found inconsistently; some studies found that non-whites were less likely to maintain contact, and other studies found no difference in terms of ethnicity 4. However, there is no literature regarding immigrants’ service use in First Episode Psychosis (FEP).

Objective

The aims of the study are:

- to assess if FEP services are successful at engaging young immigrants in treatment (follow-up and medication compliance) 2 years after admission.
- to compare symptomatic and functional outcome between immigrants and non-immigrants.

Methods

Participants:
Age 18-30
Primary diagnosis of FEP, untreated psychosis or treated less than 1 year prior to admission
Admitted to 2 defined catchment area early psychosis programs, covering 48% of the inhabitants of Montreal, a metropolis of 1.6 million with 31% immigrants 5.

Ethics:
All subjects gave written informed consent. Project was accepted by ethics and research committees of FEP program hospitals.

Methodology:
Prospective 2-year longitudinal study
Data collected at admission, at 1 and 2 years by research interviews, chart reviews and clinician’s reports, including sociodemographic status, symptoms, medication, compliance, diagnoses (DSM-IV-TR criteria), social functioning and attrition rate.

Study groups:
Non-immigrant (included 2nd gen. with mixed parents: i.e. one parent immigrant and the other non-immigrant)
Immigrants (1st and 2nd generation)

Statistical analysis with SPSS v20

Test for continuous variables and Pearson Chi squared test for categorical variables

Correlation analysis for potential confounding factors of attrition rate. Variables included in the model (migration status, substance use disorder, education level, medication compliance, homelessness history, living arrangements and diagnosis). We selected variables with correlation >= 0.2 and included them in a binary logistic regression model.

Results

Admission cohort characteristics

<table>
<thead>
<tr>
<th>N=223</th>
<th>Non-immigrants</th>
<th>N=120</th>
<th>Immigrants*</th>
<th>N=103</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>23.0</td>
<td>27.5</td>
<td>22.5</td>
<td>24.0</td>
</tr>
<tr>
<td>Male</td>
<td>81 %</td>
<td>94 %</td>
<td>65 %</td>
<td>75 %</td>
</tr>
<tr>
<td>Single</td>
<td>87 %</td>
<td>76 %</td>
<td>49 %</td>
<td>55 %</td>
</tr>
<tr>
<td>Years of education</td>
<td>11.0</td>
<td>12.0</td>
<td>9.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Work or school</td>
<td>41 %</td>
<td>55 %</td>
<td>24 %</td>
<td>39 %</td>
</tr>
<tr>
<td>Legal history (accusation)</td>
<td>28 %</td>
<td>30 %</td>
<td>25 %</td>
<td>26 %</td>
</tr>
<tr>
<td>Homelessness history</td>
<td>15 %</td>
<td>20 %</td>
<td>15 %</td>
<td>14 %</td>
</tr>
</tbody>
</table>

Change in medication adherence

<table>
<thead>
<tr>
<th>N=120</th>
<th>Non-immigrants</th>
<th>N=56</th>
<th>Immigrants*</th>
<th>N=64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of medication</td>
<td>1 year</td>
<td>59 %</td>
<td>62 %</td>
<td>57 %</td>
</tr>
<tr>
<td>2 year</td>
<td>41 %</td>
<td>38 %</td>
<td>43 %</td>
<td>44 %</td>
</tr>
<tr>
<td>3 year</td>
<td>15 %</td>
<td>12 %</td>
<td>14 %</td>
<td>15 %</td>
</tr>
</tbody>
</table>

variables included in the model: medication compliance, education level, immigration status, substance use disorder, homelessness history, legal history, years of education, work or school, living arrangement, and diagnosis.

Logistic regression

Logistic regression to measure the effect of immigration status on adherence to medication.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds ratio</th>
<th>CI 95%</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-immigrants vs immigrants</td>
<td>0.336</td>
<td>0.185-0.613</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Discussion

Immigrants and non-immigrants entering FEP services had similar symptom levels, but the difference in GAF scores suggests a somewhat lower level of functioning at baseline. However, immigrants were more likely to be living with their families and less likely to have a substance use disorder.

There was no association between immigration status and compliance with medication. The overall good compliance suggests that the two specialized Early Intervention Services are effective in promoting compliance with medication for immigrants as for non-immigrants, when engaged in services.

At 2 years, 1st and 2nd generation immigrants were three times more likely to be lost to follow-up compared to non-immigrants, even when controlling for potential confounding factors like substance use disorder.

Limitation: Lack of statistical power to compare ethnic groups among themselves.

We suggest different hypotheses to account for this difference in engagement in treatment between the 2 groups: increased mobility of immigrants, different system of meanings (to explain mental illness), discrimination and stigmas. We suggest that these factors could be mediated through difference in the therapeutic alliances. Further research is warranted to understand this phenomenon and therefore to offer services that would be better adapted to immigrants with first episode psychosis.

References

3-Lindert et al 2008
5-Statistics Canada, Census 2006.