Social determinants of disability among international immigrants in Chile

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Why study disability among immigrants in Chile?

- International immigration to Chile has rapidly increased in the past decade.
- It is still fairly small in scale (immigrants are 1.6-1.8% of the Chilean population), but has become significant to economic growth and the innovation of services.
- One persistent multidimensional and complex long-term health problem in Chile is disability.
- The model of the social determinants of health may be relevant to understanding the multiple factors affecting disability.
- However, there has been no study in Chile exploring socio-economic determinants of disability in the immigrant population at a nation-wide level.

How was the study conducted?

- **a. Chilean national survey: CASEN**
  Cross-sectional analysis of a large Chilean population-based survey conducted in 2006 (sample size 268,883 from 73,720 dwellings).
  1% of the total sample reported being international immigrants in Chile.

- **b. Measuring Disability:**
  Any disability (binary)
  Type of disability (visual/hearing/speaking/learning/physical/psychiatric)

- **c. Social determinants:**
  Demographics: age, sex, marital status, ethnicity, urban/rural.
  Socio-economic heterogeneity: Low, Medium and High groups were estimated by the combination of income/education/occupation through cluster analysis.
  Material living standards: quality of housing, sanitary conditions, household assets and overcrowding

- **d. Analysis:** Weighted estimations were conducted in STATA 10.0

What did the study find?

**ANY DISABILITY:**

Immigrants reported a lower rate of disability than the Chilean-born (3.55% vs 6.93%, p<0.01)

**a. Socio-demographics:**

- **Age (OR=1.04) and living over 20 years in Chile (OR=2.95) were positively associated with disability among immigrants.**

**b. Socio-economic status:**

- Self-employed, ill and retired immigrants were more likely to be disabled (p<0.01). There was also a clear gradient by SES.

<table>
<thead>
<tr>
<th>Socioeconomic status</th>
<th>Total immigrants</th>
<th>Chilean-born population</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2.05%</td>
<td>6.93%</td>
</tr>
<tr>
<td>Medium</td>
<td>4.97%</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>6.01%</td>
<td></td>
</tr>
</tbody>
</table>

Immigrants with Low SES reported a higher chance of being disabled than both the High and medium SES groups (OR 4.57, p<0.001)

**c. Material conditions:**

Among immigrants, in contrast to the Chilean-born, there was no clear association between any disability and material living conditions.

**TYPE OF DISABILITY:**

Visual and physical disability rates were lower among immigrants v/s Chilean-born (p<0.01).

Results & Comments

- Immigrants in Chile were a heterogeneous group with a wide variation in their socio-economic status (SES).
- Disability was strongly affected by age and SES in both immigrants and the Chilean-born.
- There was an apparent healthy migrant effect found among the total immigrants, but it disappeared among those that had been living for 20 years or more in Chile.
- Moreover, immigrants with Low SES showed no difference in their crude rate of disability compared to the Chilean-born.
- Immigrants living in the Low SES had a higher chance of being disabled (high SES reference), even after controlling for age and other relevant determinants.
- Among immigrants, there was no association between any disability and material living conditions, but this relationship varied by type of disability.

Key findings

1. Immigrants in Chile are a heterogeneous group with a wide variation in their socio-economic status.
2. Disability among immigrants in Chile is a complex, multidimensional problem.
3. This health problem is strongly affected by age and socio-economic status among both immigrants and the Chilean-born.
4. Due to its clear association with socio-economic status, disability requires further discussion in Chile.