Dynamic Seasonal Variation

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Introduction

Time series of incidence counts often show secular trends and seasonal patterns. We present a model for incidence counts capable of handling a possible gradual change in growth rates, seasonal patterns, serial correlation and overdispersion.

Analysis

\[
H_k = \sum_{i=1}^{4} \theta_{c,k} \cos \left( \frac{2\pi i m t k}{m} \right) + \theta_{s,k} \sin \left( \frac{2\pi i m t k}{m} \right)
\]

Total number of cases 275,468

<table>
<thead>
<tr>
<th>Age</th>
<th>Median (25% - 75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>67 (58-76)</td>
</tr>
<tr>
<td>Women</td>
<td>75 (66-82)</td>
</tr>
</tbody>
</table>

Materials

Incident acute myocardial infarctions and heart arrests in the Danish population aged 20 or more, in the period of January 1980 until August 2008.

Data.

Daily number of incident cases per 100,000 from January 1980 until August 2008.

References