Poster Determinants for Oral-Health-Related Quality of Life among Danish adults
Christensen, Lisa Bøge; Hede, Børge; Fiehn, Nils-Erik; Holm-Pedersen, Poul

Publication date:
2011

Document version
Early version, also known as pre-print

Citation for published version (APA):
Determinants for Oral-Health-Related Quality of Life among Danish adults

Christensen LB\textsuperscript{1}, Hede B\textsuperscript{1,2}, Holm-Pedersen P\textsuperscript{1}, Fiehn NE\textsuperscript{1}

University of Copenhagen, Faculty of Health Sciences, Dental School, Denmark\textsuperscript{1}
Special Dental Care, Health and Care Administration, City of Copenhagen, Denmark\textsuperscript{2}

Objectives
Identify and analyze determinants for oral-health-related quality of life among adults admitted to a Danish research program on general health and lifestyle (DANHES 2007-2008)

Materials and methods
- Study population: 4402 volunteers invited among participants of main study (n=18065) in 12 Danish cities.
- Age 18-96 years (average 54)
- Structured interviews (from main study and dental study) and clinical oral examination
- Oral-health-related quality of life measured by a 10 item index
- Non-parametric statistical methods, chi-square, simple and multivariate logistic regression

Results
- 33 persons were edentulous, 7 % wore dentures, mean DMFS = 62
- 88% were regular users of dental care
- 24 % reported oral-health-related quality of life problems
- 6 % reported score of 3 or more oral-health-related quality of life problems (maximum score = 30)

Most frequent problems because of appearance of teeth (or dentures):
- Feeling embarrassed (13 %)
- Feeling tense (9 %)
- Avoid smiling/laughing (6 %)
- Difficulties with eating food due to mouth or teeth problems 9 %

Simple and multivariate logistic regression of odds ratio for high score of oral-health-related Quality of Life (index of three or more-problems)

<table>
<thead>
<tr>
<th>Category</th>
<th>Simple Odds ratio</th>
<th>Multivariate Odds Ratio</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No dental visits (5 yrs)\textsuperscript{***}</td>
<td>5.7</td>
<td>4.8</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Edentulousness\textsuperscript{**}</td>
<td>3.7</td>
<td>4.3</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Number of natural teeth \textsuperscript{*}</td>
<td>1-9</td>
<td>3.0</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>10-19</td>
<td>2.2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Wearing dentures \textsuperscript{*}</td>
<td>2.9</td>
<td>3.4</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>DMFS &gt; 100 \textsuperscript{*}</td>
<td>1.7</td>
<td>2.5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Decayed surfaces &gt;= 2 \textsuperscript{*}</td>
<td>1.6</td>
<td>1.6</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

\textsuperscript{*} controlled for gender, age, ethnicity, smoking habits, morbidity/handicap, physical activity, dental visit habits
\textsuperscript{**} controlled for gender, age, ethnicity, smoking habits, morbidity/handicap, physical activity
\textsuperscript{***} controlled for gender, age, ethnicity, smoking habits, morbidity/handicap, physical activity and number of teeth

Conclusions
- Regular dental visits and high number of natural teeth are determinants for high level of oral-health-related quality of life
- Untreated caries, wearing dentures and high caries experience are determinants for reduced oral-health-related quality of life

The study was economical supported by Tryg Foundation, National Health Insurance and Danish Regions