RESEARCH LETTER

Patients’ with obstructive sleep apnoea syndrome (OSAS) preferences and demand for treatment: a discrete choice experiment

Rationale Despite its high level of effectiveness, initial acceptance of continuous positive airway pressure (CPAP) and regular use in patients with obstructive sleep apnoea syndrome (OSAS) are still an issue. Alternatively, oral appliances (OAs) can be recommended. To improve patient engagement in their treatment, physicians are advised to take into account patient preferences and to share the therapeutic decision. We aimed to determine patients’ preferences for OSAS treatment-related attributes, and to predict patients’ demand for both CPAP and OAs.

Methods A discrete choice experiment (DCE) was performed in 121 newly diagnosed patients consecutively recruited in a sleep unit. Regression parameters were the highest for impact on daily life and effectiveness ahead of side effects. In the French context, the demanding probabilities for CPAP and OAs were 60.2% and 36.2%, respectively. They were sensitive to the variation in the amount of out-of-pocket expenses. Further research is needed to investigate more specifically how negative impact on daily life and €378 (€233) out-of-pocket expense per year (in the French context).

RESULTS

All the estimates of the model were significant and of the expected sign. Patients preferred a high rate of effectiveness, non-severe side effects, a short time to wait before treatment to be effective, a low negative impact on daily life and a less expensive treatment. ‘Negative impact on daily life’ was the most influential attribute on the patients’ choices. Its relative impact was twice larger than that of the second most influential attribute, which was the ‘effectiveness’ attribute (table 1).

Figure 1 Illustration of a choice task.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>No treatment</th>
<th>Treatment “A”</th>
<th>Treatment “B”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of effectiveness (i.e. ability of treatment to eliminate snoring and apneas if used as instructed)</td>
<td>40%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Severity of side effects (a severe side effect was depicted as a side effect that could impose cessation of treatment)</td>
<td>Not severe</td>
<td>Severe</td>
<td></td>
</tr>
<tr>
<td>Time before improvement in health condition</td>
<td>No improvement of your health state at no cost</td>
<td>4 weeks</td>
<td>Immediately</td>
</tr>
<tr>
<td>Negative impact on daily life (i.e. annoying and cumbersome nature of the equipment used in each treatment)</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Out-of-pocket expense (i.e. expense per year after reimbursement by social and private insurance)</td>
<td>€100</td>
<td>€300</td>
<td></td>
</tr>
</tbody>
</table>

Which option would you choose?
financial constraint can influence patients’ preferences.

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Competing interests BF is consultant for a French company developing and selling oral appliance devices (Orthosom).

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