HEALTH RELATED QUALITY OF LIFE MEASURES (HRQoL) IN ORTHOPTICS

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Background

Health related quality of life (HRQoL) measures are used in health care to inform clinical decision-making and policy-making decisions. HRQoL is a concept that incorporates physical and functional status, emotional status, and social functioning; and may be assessed using generic or disease-condition specific instruments. When considering the application of HRQoL instruments within ophthalmology, there are concerns that generic measures are not sensitive to the recognised symptoms of vision loss or emotional aspects of a given ophthalmic condition such as strabismus. A number of disease-specific or condition-specific measures have been designed and applied in ophthalmology. These include the Visual Function Index (VF-14); National Eye Institute Visual Function Questionnaire (NEI-VFQ: 51 and 25 item questionnaires); Impact of Visual Impairment (IVI); and the Activities of Daily Vision Scale (ADVS). However, the use of HRQoL measures in the specific field of ophthalmology is not as established.

We undertook a systematic review to look at the existing HRQoL measures that could be used in the investigation and treatment of orthoptic patients.

Methods

A systematic literature search was undertaken in November 2009. This search aimed to identify all literature that used disease or condition specific HRQoL instruments in orthoptic patients.

The electronic databases of AMED; British Nursing Index and Archive; Ovid Medline and PsycINFO were searched. Details of the search strategy are shown below. No language restrictions were applied to the search.

Search strategy employed

1. Orthoptic OR strabismus OR amblyopia OR vision loss OR vision impairment
2. Questionnaire OR quality of life OR cos
3. 1 AND 2

Narrative analysis was used to report the validity, reliability and application of the identified instruments.

Conclusions

The use of HRQoL measures is a developing area. The identified instruments have been shown to be both reliable and valid; yet their application to clinical practice has been limited. Further research is necessary to determine the impact of orthoptic issues on specific patient groups; and to determine the influence of ethnicity and parental reporting in orthoptic patients.

Results

The search identified 4 HRQoL instruments. These were the Amblyopia and Strabismus Questionnaire (A&SQ); the Amblyopia Treatment Index (ATI); the Adult Strabismus Questionnaire (AS-20); and the Intermittent Exotropia Questionnaire (IXTQ).

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Summary of HRQoL orthoptic-specific instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Item Pool Development</th>
<th>Number of Questions</th>
<th>Likert-type scale used</th>
<th>Domains or Subscales (items)</th>
<th>Mode of Administration</th>
<th>Psychometrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATI (5-7)</td>
<td>CB, LB</td>
<td>18 (atropine)</td>
<td>5-point</td>
<td>Distance estimation (3) Vision distortion (3) Diplopia (4) Problems with social contact and cosmetic problems (4)</td>
<td>Parent IC, CV</td>
<td>IC, DV, CV</td>
</tr>
<tr>
<td>IXTQ</td>
<td>CB</td>
<td>19 (patching)</td>
<td>5-point</td>
<td>Attribute effects (5) Compliance (5) Social stigma (2)</td>
<td>Parent IC, CV</td>
<td>IC, CV</td>
</tr>
<tr>
<td>AS-20</td>
<td>TB</td>
<td>9-point</td>
<td>5-point</td>
<td>Self and others (5)</td>
<td>Parent IC, CV</td>
<td>IC, DV, CV</td>
</tr>
<tr>
<td>A&amp;SQ</td>
<td>PB</td>
<td>11 (age 8-12)</td>
<td>5-point</td>
<td>Inpatient only Function (9) Psychosocial (7) Surgery (2)</td>
<td>Parent, proxy or child IC, EL, CCV</td>
<td></td>
</tr>
</tbody>
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References