



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 or 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 Psyc INFO 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 visual acuity OR vision loss OR vision impairment
2. Questionnaire OR quality of life OR cosme*
3. 1 AND 2

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

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

Instru-ment	Item Pool Develop-ment	Number of Questions	Likert-type scale used	Domains or Subscales (items)	Mode of Administra-tion	Psycho-metrics
A&SQ (1-4)	CB	26	5-point	Fear of losing better eye (2) Distance estimation (10) Visual disorientation (3) Diplopia (4) Problems with social contact and cosmetic problems (4)	Self	IC, DV, CV, CCV
ATI (5-7)	CB, LB	18 (atropine) 19 (patching)	5-point 5-point	Adverse effects (8) Compliance (5) Social stigma (3)	Parent	IC, CV
AS-20 (8, 9)	PB	20	5-point	Psychosocial (10) Function (10)	Self	IC, DV, CCV
IXTQ (10, 11)	PB	12 (proxy) 17 (parent) 12 (child aged 5-7 years) 12 (child aged 8-17 years)	5-point 5-point 3-point 5-point	In parent only Function (8) Psychosocial (7) Surgery (2)	Parent, proxy or child	DV, IC

CB = clinician-based; LB = literature-based; PB = patient-based
DV = discriminant validity; CV = construct validity; CCV = concurrent validity; IC = internal consistency; R = responsiveness; TRR = test-retest reliability

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.

References

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