

The DUCATQOL: A Global Measure of Quality of Life of School Aged Children

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The DUCATQOL is a generic 36-item self-report questionnaire. The instrument is designed to measure the global quality of life (QOL) of school-aged children. The concept QOL is defined as the children's affective evaluation of different aspects of their daily functioning. The items of the DUCATQOL (using a five point visual analogue scale) cover four domains: physical, emotional, social and cognitive functioning. In a three-item supplement the children give overall judgments on their health, general well-being and their motivation during the completion of the questionnaire. The instrument allows for comparison of data about the child's functioning in life irrespective of diagnosis or disease. The DUCATQOL can be used together with disease specific modules and quality of life measures that reflect the perception of the parents or the doctor.

Some interesting results of two studies using this instrument are presented in this abstract. In the first study 84 children with a chronic illness (mean age 9.6 years, SD 2.6 years) receiving clinical care in the Leiden University Hospital completed the questionnaire. The children were treated for various conditions such as congenital heart disease, hemato-oncological problems, precocious puberty, asthma, juvenile rheumatoid arthritis, diabetes and coeliac disease.

In the second study twelve regional departments for Preventive Youth Health Care in the Netherlands drew a sample of children, boys and girls equally divided. Data was collected among 1636 children (mean age 10.6 years, SD 1.6 years). More than 66% ($n=1092$) of the children completed the DUCATQOL-questionnaire.

In both studies the DUCATQOL proved to be understandable, internally consistent (α 0.91 and α 0.92 resp.) and reproducible ($r=0.84$ and $r=0.90$ resp.). The four eight-item subscales (physical, emotional, social and cognitive functioning) showed homogeneity (α ranging from 0.71 to 0.78).

In relation to the standardization group, children with a chronic illness particularly evaluated their emotional and social functioning more negatively. Children with juvenile rheumatoid arthritis reported the lowest quality of life on all scales. Surprisingly the scores of a group of four children with functional complaints were even lower. The scale-scores of children with congenital heart disease and diabetes showed remarkable resemblance to the norm group. The children with this chronic conditions only reported more emotional problems.

The children of the norm study evaluated lowest the items concerning ill, going to bed and being alone. They weighed highest the items concerning their mother, having free time and doing things together with someone else. The children with chronic illness evaluated the items concerning being ill, being alone, having free time and doing things together with someone else quite the same, but differed in respect to the items concerning their mother (instead: being with friends) and going to bed (instead: doing nothing).

It is concluded that most of the children with a chronic illness report a lower level of quality of life compared with a norm group of healthy children. Investigations with the DUCATQOL in larger groups of children with different chronic illness are in preparation.