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Children's oral health-related quality of life

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The *Face of the Child* meeting sponsored by the Surgeon General of the United States in June 2000 acknowledged the importance of children's oral health assessments and outcomes. It has been substantiated that oral health affects the quality of life in adults like many other health conditions (1–5). Although assessments of oral health-related quality of life (OHRQoL) for adults have existed for a few decades, there is a dearth of measures assessing this multidimensional construct in children and adolescents. Thus, scant data are available regarding the impact of oral health in children. Slade, the author of the most widely used assessment of adult OHRQoL instrument, the Oral Health Impact Profile (OHIP), advocates for the development of OHRQoL measures for children and their caregivers (6).

To date, there are no published OHRQoL measures developed using school-aged children's OHRQoL in the US. Understanding and assessing children is complex and perplexing as they are not a stable target because of their emerging-developmental skills and functions (e.g., abstract reasoning). Therefore, it is understandable why children's assessments are slow to emerge.

Yet, we can incorporate what child developmental specialists have learned – that early school-aged children are capable of expressing a range of emotions (e.g., anxiety, happiness) as well as applying cultural values like beauty (7–9). Further, we must glean information from existing children's HRQoL measures (e.g., Children's Health Questionnaire).

This volume is dedicated to the development of the Child Oral Health Impact Profile (COHIP). The overall goals of the development process were to create a generic instrument sensitive to oral health impact for school-aged children from 8–15 years old across various conditions, health systems and ethnicities. We have developed an instrument based on Jokovic's initial item pool used in the development of the Child Perception Questionnaire (10). However, the development of the COHIP departed from that of the Children's Perception Questionnaire – most notably by the inclusion of positive items that tap positive health constructs. Using an established multi-staged approach in questionnaire development, both international as well as national experts, clinicians, children, and their caregivers have participated in the process.

The theoretical perspective underpinning the COHIP is consonant with the World Health Organization's definition of health: 'more than the absence of disease' (11). We have embraced The World Health Organization Quality of Life Group's definition of quality of life as an 'individual's

perceptions of his/her position in life in the context of culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns' (12). HRQoL experts emphasize that positive attributes are essential in quality of life assessment (13–15).

In the field of oral health much emphasis is placed on technological quality as rather than attending to patient perceptions. In servicing children, clinicians may recognize that their long-range goal is to improve children's quality of life, yet, we are just beginning to learn how much relevance and impact oral health has on children and their caregivers.

Given the existence of oral health disparities and access to care for children of color and low SES, it is deemed relevant to ascertain in what ways oral health care impacts the children we are serving, as well as how oral health impacts children who are not being served. Further, certain dental treatments could enhance children's well-being rather than merely reduce negative symptoms, therefore, the need to assess positive attributes and outcomes is essential to a good quality of life measure (16). It is with this notion in mind that the inclusion of positive attributes associated with oral health is consonant with our future research goals in assessing OHRQoL (4, 6, 15, 16).

Although the evaluative properties of the COHIP are yet to be tested, this special issue presents the theory behind the scale, its development, and psychometric testing that has been carried out to date. In summary, the investigative team sought to develop a culturally relevant and sensitive instrument, the Child Oral Health Impact Profile (COHIP), to measure OHRQoL among school-aged children having varied oral health conditions. Furthermore, it was the intention to create an instrument that could be utilized in epidemiological studies as well as clinical trials. Given the additional goal to discriminate across these different treatment groups, pediatric dental, orthodontic, and craniofacial, participants from the US and Canada were included so that the effect of location and health care system could be evaluated.

This special issue consists of four papers addressing children's OHRQoL. The first report, 'Development of the Child Oral Health Impact Profile (COHIP),' is a detailed account of the genesis of the scale. The authors have utilized multiple stages and included both quantitative and qualitative data to modify the initial item pool (10, 17), to develop items, and to examine the face validity of the items as well as the relevance and importance of the content of the questions. Additionally, the theoretical underpinning for the project is reviewed in this paper.

The next report describes discriminant and convergent construct validity testing and reliability testing for the COHIP. The analyses are based on a convenience sample of treatment-seeking children from New Jersey and New York in the United States and from Montreal, Canada. The paper, 'Reliability and Convergent and Discriminant Validity of the COHIP, examines empirical data on discriminant and convergent validity testing as well as internal consistency and reproducibility of the measure in treatment-seeking and community samples.

The third report further details validity testing by utilizing measures of facial image and self-concept among children seeking orthodontic care in a university-based facility in the state of North Carolina, USA. This paper, 'Concurrent Validity of the COHIP,' identifies expected associations found between the various subscales on the COHIP and specific self-concept and self-image domains. This report provides preliminary evidence for concurrent validity in the scale.

The four report, 'Concordance between Caregiver and Child Reports on the Child Oral Health Impact Profile,' deals with proxy ratings of OHRQoL by caregivers. A detailed account of concordance and discordance is presented in this report on child-caregiver OHRQoL ratings among the treatment-seeking groups.

Two renowned researchers in OHRQoL collaborate in writing the final piece in this issue, entitled 'The COHIP – Current Status and Future Directions.' It provides a summary of the reports followed by recommended conduct of measurement issues and research utilizing the COHIP.

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