Abstract

Abstract of thesis entitled

**Early childhood caries and quality of life of pre-school children**

submitted by

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for the degree of Master of Dental Surgery

at The University of Hong Kong

in August 2008

Dental caries is one of the most common chronic disease of childhood. Early childhood caries (ECC) describes what encompasses all dental caries occurring in the primary dentition of children aged 71 months or younger. Severe early childhood caries (S-ECC) refers to ‘rampant’ patterns of decay. Untreated dental caries in children frequently leads to pain and infection necessitating emergency treatment or hospitalisation. Widespread health issues, such as delayed growth and cognitive development by interfering with nutrition, concentration and school participation, are also associated with ECC.

The Pediatric Quality of Life Inventory Version 4.0 (PedsQL™ 4.0) is one of the most commonly used generic measures for assessing health related quality of life (HRQoL) among children and has been validated in Hong Kong. The Early Childhood Oral Health Impact Scale (ECOHIS) is the only oral-health related measure available at the moment to assess the impact of oral problems on the life quality of pre-school children and their families. It is unclear whether oral-health related measure performs better than generic measure in assessing the impact of dental caries on the life quality of early childhood.
This study aimed to develop and test the psychometric properties of a Chinese version of ECOHIS and to compare the impact of dental caries on quality of life of pre-school children as assessed by ECOHIS compared to PedsQL™ 4.0.

A Chinese version of the ECOHIS was derived by cross-cultural adaptation using forward-backward translation. The measure was pilot-tested to access conceptual equivalence and relevancy of each item. A convenience sample of 111 children (mean age: 49 ± 12 months): 64 of whom were categorised as having S-ECC and 47 as being caries-free were recruited. Clinical oral assessments were conducted by a trained examiner blind of the parental assessments. Primary caregivers completed the Chinese version of ECOHIS and PedsQL™ 4.0. Re-assessments were conducted 3 weeks after initial evaluation. Psychometric properties of the ECOHIS were tested. The performance of PedsQL™ 4.0 and ECOHIS in assessing the impact of S-ECC on the children’s quality of life were assessed and compared.

The Chinese version of the ECOHIS was developed with minor modifications and was found to have sufficient validity and reliability. However, the responsiveness of the measure was not tested in this present study, which could be a further research area.

ECOHIS showed a better discriminant property between children with S-ECC and caries-free children than PedsQL™ 4.0. The use of an oral-health specific measure, such as the ECOHIS, was proved more useful than the generic measure in assessing the impact of dental caries on functional and psycho-social well-being of pre-school children.

(450 words)