Identifying the link between obesity and dental decay in preschool children

Dr Amit Arora from the School of Science and Health has been awarded an Early Career Fellowship from the National Health and Medical Research Council (NHMRC) to assess the relationship between dental decay and obesity in disadvantaged preschool children.

‘Dental decay and obesity amongst Aussie kids continues to be a significant concern, especially for children from a low socio-economic status (SES),’ explains Dr Arora. ‘Low SES conditions can have a negative effect on children’s growth, nutrition, socialisation, schooling and of course their health. What we know about dental decay and obesity in preschool children comes from cross-sectional studies and, therefore, doesn’t tell us about the progress and development of the affected children.’ This fellowship aims to fill in some of those knowledge gaps and investigate the relationship between dental decay and obesity in preschool children.

The research will be completed in phases to ensure a thorough investigation. A systemic review of dietary interventions for preventing dental caries and obesity in preschool children is currently underway. Taking advantage of the Healthy Smiles Healthy Kids study – a birth cohort study, from birth to age 3 – a longitudinal analysis will be used to identify common risk factors such as pre-natal and natal characteristics, diet, SES, caregiver health literacy and number of visits to a healthcare professional to clarify the relationship between these factors and dental decay and obesity. Lastly, the association of pre-natal events and hospital admission due to dental caries will be determined.

The outcomes of the research will provide vital clinical information that will assist health professionals better manage obesity and dental decay. The findings will be made available to inform the government on obesity and oral health promotion measures, improving health policies and the health of Australians.

Project Title: Assessing relationships between dental decay and obesity in disadvantaged preschool children

Funding has been set at: $334,596

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October 2015

NHMRC ID: 1069861

Associated organisations:
South Western Sydney Local Health District
Sydney Local Health District
Sydney Dental Hospital
The Children's Hospital at Westmead
Sydney Medical School, University of Sydney
UNSW Australia
Ingham Institute
University of Adelaide
Curtin University of Technology