Developing Guideline for Caries Prevention and Management by Caries Risk Assessment for Pre-school Children using ADAPTE Process and Delphi Consensus

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Introduction

• One in two pre-school children have caries in Hong Kong and for the most part, they remain untreated
• Dental treatment received by pre-school children with caries in Hong Kong is sub-optimal
• Wide variation in the care and treatment approach to pre-school children with caries exists among dental practitioners
• Clinical practice guideline assist clinical decision making and promote optimal, evidence-based and equitable patient care
• Provision of a guideline for caries prevention and management by caries risk assessment for pre-school children is needed in Hong Kong

Aim

• To develop an evidence-based clinical practice guideline for caries prevention and management by caries risk assessment for pre-school children in Hong Kong

Material and methods

• ADAPTE process
• consists of 3 main phases, each with a set of modules

Phases | Tasks | Details
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Set up Phase | Prepare for ADAPTE Process | - preparation
Adaptation Phase | Define health questions | - established the scope and key questions
| Search and screen guidelines | - guideline clearingshouses and internet sources searched for systematic reviews and guidelines related to the topic
| Twenty non-duplicate guidelines, protocols or policy statements were identified | - eleven guidelines were retained after screening
Assess guidelines | A panel group with 4 teaching members from Paediatric Dentistry, Faculty of Dentistry, HKU, was set up | - panel members assessed the 11 retrieved guidelines using AGREE II, a generic instrument to assess the guideline development process and its report
| AGREE II scores of each guideline tabulated and evaluated | Design and select guidelines | three source guidelines were selected:
- AAPD 2013
- Irish Oral Health Services Guideline Initiative 2005
- SIGN 2005
| recommendations compared and updated with current best evidence from literature | Draft guideline report | the adapted/adopted recommendations drafted with reference to acceptability and applicability of local context
| External review | consultation draft of the adapted guideline was produced | Delphi consensus
| Plan for future review and update | draft guideline and recommendations revised to incorporate feedback from external reviewers where necessary | produced final guideline

Results

• A total of 70 recommendations were retained (5 reached high consensus, 65 reached consensus); and 21 recommendations were discarded
• A guideline for caries prevention and management by caries risk assessment for pre-school children in Hong Kong was produced

Conclusions

• ADAPTE process and Delphi consensus enhance efficiency in developing high-quality clinical practice guideline
• A guideline for caries prevention and management by caries risk assessment for pre-school children with consensus evidence-based recommendations was developed using ADAPTE process and Delphi consensus in Hong Kong
• The guidelines can be implemented and adopted by Hong Kong dental practitioners (and elsewhere)

References
- Irish Oral Health Services Guideline Initiative 2009

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