Guidelines

EARLY CHILDHOOD ORAL HEALTHCARE

Never Too Early To Start

Oral Health Division
Ministry of Health Malaysia
2008

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Oral Health Division, Ministry of Health Malaysia

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FOREWORD

SENIOR DIRECTOR
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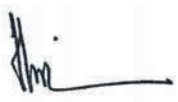
Oral health care begins from womb to tomb and the requirements of care differ from one phase of life to another. Thus, the Oral Health Division, Ministry of Health has produced various guidelines on implementation of oral health programmes for antenatal mothers, preschool children, schoolchildren, children with special needs, the elderly and trainee teachers.

The missing link is a guideline on oral healthcare for toddlers (children below the age of five years). This programme began as a pilot project in 1991 in Sarawak and expanded on an ad-hoc basis throughout the nation. In addition, survey findings show that a high proportion of our 5-year-old children are still afflicted by dental caries. This guideline is thus timely to fill the gap as prevention of early childhood caries and maintaining a caries-free deciduous dentition may be considered the gold standard of best oral healthcare practice for infants and toddlers.

Children who have early childhood caries are found to be more likely to experience caries in the permanent dentition. Hence, early attention to a child's oral health will benefit the child over a lifetime. Although parents are the key caregivers, children are also increasingly being cared for by child minders as more women enter the workforce. The role of medical and healthcare personnel, especially those involved in the care of infants and children are equally important since they are more likely to see new mothers and infants in their daily practice than oral health personnel.

This guideline therefore emphasises on creating oral health awareness among parents, childcare providers and health personnel and working in close partnership with them to consolidate the oral health programme for toddlers. Successful implementation of this programme will contribute towards promoting optimum growth and development of toddlers and a ***Lifetime of Healthy Smiles***.



DATIN DR NORAIN BT ABU TALIB
MAY 2008

1. INTRODUCTION

The government oral health services began as a school dental service in the 1950s. It has since expanded to include other priority groups including antenatal mothers (1970s) and pre-school children (1984). The antenatal programme targets mothers as agents of change towards better oral health for the family. The pre-school oral health programme focuses mainly on oral health preventive and promotive activities to create awareness, inculcate good oral hygiene habits besides familiarising the children with oral health services. In spite of these efforts, dental caries continues to be a major oral health problem among pre-school children.

While pre-school children are those aged 5-6 years, toddlers are the group of children aged 4 years and below. Under the Family Health Programme of the Family Health Development Division, Ministry of Health (MOH), toddlers receive health services such as immunisation at maternal and child health clinics (MCHC). In 1991, Sarawak introduced a pilot project for toddlers at MCHCs with the view of overcoming the problem of early childhood caries through early intervention[1]. Dental nurses provide anticipatory guidance to parents/carers and conduct cursory oral examination on toddlers. Subsequently, this programme was adopted by other states and also expanded to include toddlers at childcare centres.

Activities under the toddler programme are documented in the Annual Health Management Information System (HMIS) report of the MOH since 2005. Of the estimated population of about 2.5 million toddlers in 2006, 104,598 benefited from activities under this programme[2].

2. LITERATURE REVIEW

2.1 Demographic profile of dental caries and associated risk factors

Early childhood caries (ECC) is a problem in both developing and developed nations. The term severe early childhood caries (s-ECC) has been used to describe the condition where many deciduous teeth, especially the upper incisors, in the pre-school child are affected by tooth decay[3]. In children younger than 3 years of age, any sign of smooth surface caries is indicative of s-ECC .

A study done in Brazilian nurseries reported that 46% of 3-4-year-old children had caries with 17% having s-ECC[4]. Occurrence of caries in this group of children was found to be significantly associated with social class, mother's education and the age at which breastfeeding terminated. It was also reported that feeding bottles with added sugars were being given to 80% of children in the nurseries.

In the Philippines, 59% of 2-year-olds and 90% of 4-year-olds had caries[5]. Almost half of the children were weaned at more than 2 years old. Tooth brushing was only started at an average of 2 years of age. Among 3-4-year-olds a significant increase in caries levels was noted for those who started brushing at a later age, had frequent snacks, and only visited the dentist for emergency reasons. In Thailand, ECC is also a problem with 82.8% of children aged 15-19 months affected[6].

Dental caries has been reported as the most prevalent chronic infectious childhood disease in the United States. High rates of ECC are seen among children of low-income families, and certain ethnic minorities, where parents have a lower

educational level[7-8]. The latest oral health data indicates that while oral health is improving for most Americans, tooth decay among pre-school children is on the rise[9]. Over in the UK, the significant improvements observed in older children are not seen among 5-year-olds[10] while in Sweden, time trends from 1967 found that caries prevalence among 4-year-olds fell from 83% (1967) to 42% (1987)[11]. However, from 1987 there was a shift in the trend of declining caries and since 1997; caries prevalence is on the rise, increasing to 46% in 2002. At the same time, between 1987 and 1997 an increase in the consumption of sweets and soft drinks was also noted.

Furthermore it has been noted that infants with nursing caries have a much higher level of mutans streptococci (MS) and lactobacilli than caries-free children[12]. There is evidence of MS colonisation as early as 10 months of age and 25% of children aged 12 months and below had detectable levels of MS while 60% of those in 15-month age group were already infected. This study suggests that prevention of MS colonisation may need to be started before a child's first birthday.

2.2 Importance of early intervention

Children are less likely to have oral disease if risks are identified early and measures are taken to manage the contributing factors. A review of caries-related emergencies in a children's hospital found that for 52% of the children (3.5 years of age and below) who were treated, it was their first contact with oral health services[13]. In a survey done in Sarawak, 33.4% of parents said that they would bring their child to the dental clinic only if the child has a toothache[14]. Contemporary guidelines recommend oral examination and risk assessment within 6 months of eruption of the first tooth or latest at the age of 1 year to provide appropriate parental guidance[15-18].

The perception, knowledge and practices of parents and childcare providers have great impact on the oral health of toddlers. Locally, only 78.1% of parents of 5-year-old children considered the deciduous dentition to be as important as the permanent dentition[14]. Parents, childcare providers and health personnel need to be educated on simple interventions that can reduce the risk of developing tooth decay.

Anticipatory guidance (AG) is an interactive process in providing practical and appropriate health information to parents and childcare providers to help them understand what to expect during the child's development. Providing counselling through AG and forming partnerships between the home environment and health/childcare services will further encourage healthy practices to be established and maintained.

2.3 Importance of nutrition and feeding practices

Good nutrition and healthy eating is vital for the proper growth and development of the child. Poor dietary habits are associated with the development of caries in infants and young children. A review on risk factors in the nursing caries syndrome/ ECC reported that frequency and length of exposure are important: infants with caries average 8.2 hours per day of bottle time while caries-free infants average only 2.2 hours. The age of weaning was 22 months for infants with ECC and 14 months for those who were caries-free[19].

Many mothers reject the health professional's advice to discontinue bottle use by 12 months because of fear that infants might stop drinking milk. Sugar was also added to ensure that more milk would be consumed or because of the perceived beneficial qualities of sugar[20]. This finding is supported by a local study, which found that 29.1% of parents surveyed thought that sugar is essential for the growth of children[14].

Studies have shown that children with severe caries weighed less than controls and showed evidence of failure to thrive[21-25]. After treatment of decayed teeth, there was more rapid weight gain (catch-up growth) and improvements in their quality of life.

Promoting good nutrition and healthy feeding/ eating practices will not only improve oral health but also the overall nutritional status of children, thereby contributing towards achieving optimum growth and development[26].

2.4 Involving health personnel

A review on current evidence in relation to the aetiology and prevention of dental caries in pre-school children has suggested that potentially effective interventions should occur in the first two years of a child's life[27]. While dental attendance before the age of 2 years is uncommon, contact with other health professionals is high. These primary care providers are well placed to offer anticipatory advice to reduce the incidence of ECC.

Towards this end, the US Department of Health and Human Services recommends involving general primary healthcare providers to increase access to basic oral healthcare, patient education and referral[7]. In the UK about a quarter of mothers interviewed said that health visitors and midwives were their source of information on childcare[28]. These healthcare professionals can also promote oral health in the course of promoting general health for infants, children, antenatal mothers and their families.

2.5 Early childhood oral health care programmes in other countries

The Connecticut Department of Public Health trained more than 2,000 individuals during the first year of the OPENWIDE (Oral Health Program to Engage Non-dental health and human service Workers in Integrated Dental Education) Programme[29]. Healthcare, early childhood education and childcare personnel are given training to recognise oral diseases and to carry out activities that promote oral health and prevent oral disease, including oral screening, risk assessment, anticipatory guidance and appropriate referral for oral healthcare.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program) in the US provides supplemental foods and nutrition counselling for pregnant women, new mothers and children under five years of age. Identification of oral health problems is part of the nutrition risk assessment. Other activities include classes for parents and guardians of infants and children on proper care of the gums and teeth and feeding practices that reduce the risk of developing tooth decay[30].

The Early Childhood Cavities Prevention Program in Oregon, USA aims to improve oral health in the community by providing oral health education and prevention services to pregnant women and children[31]. MCH nurses screen and educate adults on strategies to improve their oral health and that of their children during home visits. The nurses also screen and assess infants and children for risk of oral health problems and apply a fluoride varnish to children at high risk for cavities.

New South Wales, Australia has an Early Childhood Oral Health Programme that focuses on in-service training on oral health for child and family health nurses and providing oral health information to all parents of newborn babies and young childre[32-33]. Oral screening is incorporated into general health checkups. Programme strategies focus on timely referrals from health nurses, early management of oral disease by oral health professionals, and increased family focus in oral health services.

In Thailand, a participatory dental health education programme that involved small group discussion for 520 mothers/ carers of 6-19-month-old children was found to be effective in increasing oral hygiene practice but not in preventing the development of ECC[34].

3. RATIONALE

The first national epidemiological survey on pre-school children in 1995 showed that almost nine out of ten children (87.1%) had tooth decay by the age of five[35]. Findings from the more recent National Oral Health Survey of Preschool Children 2005 (NOHPS 2005) indicate only slight improvement in caries status among 5-year-olds since then[36]. Dental caries continues to be highly prevalent (76.2%) with high caries levels in deciduous teeth (mean dmft of 5.6) and high unmet treatment need.

There has been no large-scale study on oral health status of toddlers in this country. However, NOHPS 2005 reported that more than half (55.8%) of the children had 3 or more deciduous teeth affected by caries and more than a quarter (25.3%) had dmft > 10. Oral healthcare should therefore start early for prevention of dental caries among children below the age of five.

Children who experience ECC are at greater risk for subsequent caries development in the permanent dentition. The prevention of ECC in toddlers will contribute towards improving oral health in pre-school children.

Poor oral hygiene and inappropriate feeding practices/dietary habits are associated with the development of caries in infants and young children. Because young children are not able to control these factors, their oral health is greatly influenced by the attitude, knowledge and practices of their parents/carers towards oral health. Childcare providers can also have positive influence on the nutrition and development of knowledge and attitudes of young children towards dietary and hygiene practices. Moreover, with increasing numbers of women joining the workforce, many children under the age of five are being cared for in childcare centres. Toddlers at childcare centres can therefore be a captive group for a structured programme in early oral health care.

Furthermore, in the earliest years of life, general health rather than oral health personnel are more likely to see these children. The Family Health Services of the MOH provide appointments at MCHCs for immunisations and well-child visits. The community nurses in the MCHC are therefore well placed to assist in identifying and referring high-risk children for oral healthcare and in giving oral health education to parents.

Adopting a multisectoral approach by integrating oral health promotion and disease prevention into the daily practice of community nurses and childcare providers would help to reduce caries prevalence in future generations especially among high-risk children from lower income families. The development of a guideline towards effective implementation of an early oral health care programme for toddlers is thus timely.

4. SCOPE

This oral healthcare programme for toddlers is aimed at providing promotive and preventive activities targeted at toddlers, parents/ carers, childcare providers and health personnel.

The activities shall be conducted at maternal and child health clinics, community health clinics and registered childcare centres. These services will also be extended to private registered childcare facilities within the constraints of local resources.

Oral health seminars shall be conducted for childcare providers including those who attend Basic Childcare Provider Courses (Kursus Asas Asuhan Kanak-kanak) and that conducted by KEMAS Training Centres. Health personnel, in particular community and health nurses, will also be given such exposure through refresher in-service training organised locally. In addition, other medical and health personnel involved in the care of infants, children and ante and postnatal mothers at polyclinics and hospitals may also be included in such awareness training so as to ensure referrals of all infants and toddlers to dental clinics.

5. OBJECTIVES

5.1 General objective

To promote and maintain good oral health of toddlers towards achieving their optimum growth and development.

5.2 Specific objectives

- To create awareness among parents, childcare providers and health personnel towards oral health care for toddlers
- To empower parents, childcare providers and health personnel so that they are able to:
  - provide healthy food, adopt correct feeding practices and cultivate good eating habits in children
  - maintain and instil good oral hygiene practices
  - recognise early signs of oral diseases and seek oral healthcare or make referrals
- To reduce the prevalence of early childhood caries

6. STRATEGIES

The following strategies are adopted for the implementation of oral health care for toddlers:

6.1 Provide early oral health care for toddlers from infancy
6.2 Educate parents, childcare providers and health personnel on:
   a. The value of oral health in general health
   b. Their roles in promoting oral health of toddlers
6.3 Work in partnership with parents, childcare providers and medical and health personnel in promoting oral health of toddlers

7. OPERATIONAL PROCEDURES

To ensure that toddlers may benefit from receiving oral health care as early as possible, the programme will focus on captive groups of toddlers who receive immunisations and check-ups at MCHCs and those who are under the care of registered childcare centres and nurseries. In addition, awareness training is extended to all relevant medical and health personnel to promote early referral of infants and toddlers to the nearest dental clinic for a first dental visit by one year of age.

The aim is for every toddler to be seen at least once per year by oral health personnel so that anticipatory guidance may be given to parents and childcare providers. Additionally, it is hoped that health personnel, in particular the community and health nurses, will reinforce the advice to parents at every MCHC visit. This will ensure that toddlers receive early oral health care and intervention to prevent the development of ECC.

Oral health care for toddlers is operationalised as follows:

7.1 Provide early oral health care for toddlers from infancy through:

- Planning and coordinating activities at state and district level. In this regard, it is necessary to work closely with the relevant health and childcare agencies in scheduling and implementing planned activities to benefit all toddlers.
- Creating awareness among parents, childcare providers and health personnel so that early oral health care and referrals for oral health management may be given.
- Imparting early oral health awareness in toddlers at childcare centres through tooth brushing drills (TBD), role play, puppet shows and play and learn sessions.

7.2 Educate parents, childcare providers and health personnel by:

- Providing anticipatory guidance for parents and childcare providers
- Organising oral health seminars for childcare providers and health personnel to create greater awareness on the value of oral health in general health and the role they can play in promoting oral health of toddlers
- Preparing an oral health module and relevant oral health education pamphlets to support this activity

7.3 Work in partnership with parents, childcare providers and health personnel in promoting oral health of toddlers through:

- Taking proper care of children's oral health from infancy at home and in childcare centres
- Integrating oral health advice into general health education for parents
- Referring all infants and toddlers to dental clinics for a first dental visit by age one year

The operational procedures in implementing this programme are detailed in Appendix 1.

8. MONITORING AND EVALUATION

Monitoring is done regularly at local and state level to ensure that activities are being implemented as planned and that targets are achieved. Data is collected using the Health Management Information System (HMIS) formats as follows:

a. PKP 101 for recording the number of children seen under this programme
b. PKP 201 for recording the number of AG sessions and the number of parents/ childcare providers given advice
c. PKP 201 for recording the number of oral health promotion activities carried out e.g. TBD, role play, puppet shows and exhibitions
d. PKP 201 for recording the number of training seminars conducted and the number of participants

Evaluation is done on a regular basis to determine whether objectives have been achieved. The following outcome measures may be used:

a. Percentage of 6-year-olds who are caries-free
b. Caries prevalence of children aged 5 years and below
c. Oral health promotion practices in childcare centres
d. Oral health knowledge and practices of oral health seminar participants

Improvement in oral health status is evaluated using a common indicator (percentage of 6-year-olds who are caries-free) collected for the oral health programme. Information on caries prevalence in children aged five years and below shall be obtained by planning and conducting surveys periodically at national, state or district level. The outcome of oral health seminars is evaluated based on the pre and post test results of an administered questionnaire on oral health knowledge and practice (Appendix 6). In addition, the assessment of oral health promotion practice in childcare centres that participate in this programme using a checklist (Appendix 5)willprovide an indication of whether the training seminars have produced the desired outcome.

9. CONCLUSION

Success in achieving the stated objectives requires oral health personnel to work in close partnership with parents, childcare providers and health personnel. Ensuring early childhood oral health care and creating awareness of the importance of oral health in general health will go a long way towards improving oral health of young children and contribute towards their optimum growth and development and health for life.

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Appendix 1

IMPLEMENTATION OF EARLY CHILDHOOD ORAL HEALTHCARE

Activity	Responsibility
1. PLANNING	
1.1 Do situational analysis based on the following: • Previous year's achievements • Strategies and targets • Availability of resources • Feedback and suggestions for improvement	State Deputy Director of Health (Oral Health) [SDDH(OH)]/ Senior Dental Officer (SDO)/ Dental Officer(DO)/ Dental Nurse (DN)]
1.2 Liaise with relevant agencies: • State health department (Family Health) • Health Clinic/ MCHC - District Medical Officer of Health - Family Medicine Specialist/Medical Officer • *Jabatan Kemajuan Masyarakat* (KEMAS) • *Persatuan Pengasuh Berdaftar Negeri* • Others where relevant	SDO/DO
1.3 Obtain information: • List of MCHCs and their schedule for immunisation and well-child clinics (Child Health Days) • List of childcare centres (govt and private) and their enrolment	SDO/DO/DN
1.4 Set targets: • Coverage of MCHCs /childcare centres • Number of oral health seminars (in-service training) • Number of childcare providers/ health personnel to be trained	SDDH(OH)/SDO/DO/ DN
1.5 Plan schedule of activities at MCHC and childcare centres	SDO/DO/DN
2. IMPLEMENTATION	
2.1 Brief oral health personnel on the following: • Guideline for implementation of programme • Module/ questionnaire/ checklist	SDO/DO
2.2 Organise oral health seminar for childcare providers/ health personnel in MCHC (Appendix 2)	SDO/DO
2.3 Prepare roster for visits and inform MCHC / childcare centre involved • Every child shall have an oral health consultation at least once per year to coincide with the child's appointment at MCHC. (Target: 4 oral health consultation sessions from age of 1-4 years) • Childcare centres are visited at least once per year with priority for government-aided facilities	SDO/DO/DN

Activity	Responsibility
2.4 Implement activities as planned <u>Activities at MCHC</u> • Give AG to parents (Appendix 3) • Conduct cursory examination (Appendix 4) • Inform parents on oral health status of child • Give appointment for treatment/ follow-up where necessary. Preventive treatment in the form of application of fluoride varnish may be considered for children with early signs of ECC*. • Reinforce AG every year <u>Activities at childcare centres</u> • Conduct tooth brushing demonstration / activities • Organise play and learn session e.g. storytelling, finger puppets etc. • Conduct cursory examination (Appendix 4) • Refer to dental clinic where necessary • Use checklist for "Good Practice Award" (Appendix 5) to ascertain oral health promotion activities at the childcare centre.	DN
3. MONITORING	
3.1 Collect data and update HMIS formats <u>Activities at MCHC and childcare centres</u> a. Number of toddlers seen (PKP 101) b. New attendances for toddlers at MCHC c. Number of parents/childcare providers given AG (PKP 201: Toddler programme - Talks/ Number of participants) d. Number of activities carried out under toddler programme (PKP 201: Toddler programme - Number of TBD/ role play/ puppet show/ exhibition held) <u>In-service training/ seminar</u> a. Number of training seminars for toddler programme (PKP 201: Toddler programme - Number of in-service training held) b. Number of childcare providers/ health personnel given training (PKP 201: Toddler programme - Number of participants at in-service training)	DN/DO/SDO
4. EVALUATION	
4.1 Evaluation is done using the following outcome measures: a. Percentage of 6-year-olds who are caries-free b. Caries prevalence of children aged 5 years and below c. Results from assessment of childcare centres using checklist (Appendix 5) d. Outcome of oral health seminars. Pre and post test results of questionnaire (Appendix 6)	SDDH(OH)/ SDO/DO

* MOH Malaysia, Clinical Practice Guidelines. Management of severe early childhood caries. December 2005.

ORAL HEALTH SEMINAR

The oral health seminar aims to provide oral health and practical nutrition education for childcare providers and medical and health personnel so that they may contribute towards promoting and maintaining good oral health and optimum growth and development of toddlers.

Objectives:

1. To raise awareness on importance of oral health care from young
2. To promote better understanding and collaboration between sectors in oral health promotion
3. To increase the confidence of childcare providers and health personnel so that they may include oral health education within their regular health education activities

Activities:

A. Seminar/ workshop on oral health
B. Table exhibition (*Pameran berkumpulan*)
C. Tooth brushing demonstration
D. Circulation of oral health kit (pamphlets/ booklets and CD)

A. Topics to be covered in oral health seminar/ workshop:

1. Importance of oral health
   - Oral health in general health and in relation to growth and development of the child
   - Dental development with emphasis on function of deciduous dentition

2. Common oral health problems
   - Teething
   - Early signs of dental caries
   - Oral habits
   - Trauma/ dental injuries

3. Oral health care for toddlers
   - Oral hygiene
     - Methods of cleaning children's teeth
     - Amount of toothpaste to use
   - Effects of diet on dentition
     - Infant feeding practices to reduce risk of ECC
     - Healthy meals, snacks and drinks for children
     - Suitable behavioural rewards
   - Checking for early signs of ECC (Lift the Lip)
   - Having an oral examination by 1 year of age

4. Their role in oral health care of toddlers
   Medical and health personnel:
   - Recognise early signs of dental caries and make appropriate referrals to dental clinics
   - Teach parents to "Lift the Lip" to check for ECC (Appendix 4)
   - Reinforce oral health messages to parents e.g.
     - Infant feeding practices
     - Oral hygiene practices

- Nutrition guidance and healthy eating

Childcare provider:

- Incorporate oral health messages in play and learn activities at childcare centres
- Care of children's oral health
  - Cleaning child's teeth
  - Avoiding undesirable feeding practices
  - Providing healthy menu at childcare centre
  - Recognising signs of ECC and alerting parents

B. Table Exhibition (*Pameran berkumpulan*)

Holding table exhibitions will contribute towards greater effectiveness and impact of the oral health seminar. This uses the concept of "See, hear and touch" for more effective learning. A small grouped exhibition allows every participant equal opportunity to see all the displays and to gain the necessary knowledge and exposure. It also allows for more effective communication and creates good rapport that would strengthen working partnerships.

Organising a table exhibition:

- Assign participants into small groups of 6-8
- Arrange for appropriate units of table displays based on topics for discussion
- Assign two staff members (dental officer and dental nurse) at each table display
- Give each group assigned time at each display to look, touch and ask

C. Tooth brushing demonstration

- Can be conducted in groups
- Participants may brush their teeth using the free toothbrush and toothpaste given to them

D. Circulation of oral health kit/ resources

Pamphlets, flipcharts and other health education materials produced by the Oral Health Division can be used. States can also develop their own educational materials based on the recommended topics for discussion.

ANTICIPATORY GUIDANCE

Anticipatory guidance is the process of providing practical developmentally appropriate health information about their children to parents so that they know what to expect during the child's current and approaching stage of development. Providing anticipatory guidance on oral health helps parents to understand the value of good oral health and be better prepared to take the appropriate action to promote and maintain the oral health of their children. The process may be guided by some key trigger questions and based on the answers given; the relevant information or advice is given. With this information, parents can help prevent or reduce tooth decay in infants and children.

Trigger Questions	Take Home Messages	Anticipatory Guidance for Parents/ Caregivers
Infancy **Birth to 6 months**		
1. How is your own oral health?	• Bacteria that cause tooth decay (from unfilled cavities in the mother) can be passed from the parent to the infant via saliva. • Transmission can occur through sharing food and eating utensils.	• Avoid testing the temperature of the bottle with the mouth, sharing utensils or cleaning a pacifier or a bottle that has fallen with saliva before giving it back to the infant.
2. How is feeding going? 3. Do you put your infant to bed with a bottle? What is in the bottle?	• Mother's milk or breastfeeding is the best for your baby in the first 6 months of life. • Milk left to pool in the infant's mouth may lead to development of early childhood caries when teeth erupt.	• Hold the infant while feeding. Never prop the bottle or put the baby to bed with a bottle. • Do not use the bottle as a pacifier. Try singing, rocking, infant massage or a security blanket to put your baby to sleep.
4. Are you cleaning your infant's mouth? How often?	• Your infant's mouth should be cleaned after every feed.	• Clean baby's mouth after feeding with a clean, damp washcloth or gauze pad.
5. Does your infant use a pacifier? 6. Does she suck her thumb or finger?	• Thumb sucking before the age of two is normal and harmless.	• Use only a clean pacifier and never dip it in honey or anything sweet. • Never tie a pacifier around a baby's neck.

Trigger Questions	Take Home Messages	Anticipatory Guidance for Parents/ Caregivers
6 to 12 months		
1. Does your baby have any teeth erupted? 2. Any problems with teething?	• Between the ages of 6 months and 1 year, the deciduous teeth begin to erupt. • Early childhood caries may develop as soon as the teeth erupt.	• Teething pain can be relieved by gently rubbing the baby's gums with a clean finger/ cold wet towel or give a chilled teething ring.
3. How are you feeding your baby? 4. Has your baby started drinking from a cup?	• Prolonged bottle feeding may lead to development of early childhood caries. • Sugary or sticky food combines with cavity-causing bacteria to produce acids which can lead to tooth decay.	• Introduce a drinking cup to wean the baby. Drinking from a cup does not cause the liquid to collect around the teeth. Fruit juice should be taken only from a cup. • Do not add sugar to baby's food e.g. milk, drinks, cereals.
5. Are you brushing your baby's teeth?	• Cleaning of teeth should start as soon as they appear in the mouth. • Make tooth brushing a daily routine from young to develop good oral hygiene habits.	• Clean baby's teeth and gums with a soft- bristled toothbrush and plain water after each feeding and at bedtime.
6. Have you taken your child for a dental check-up?	• The first dental check-up before age of 12 months will help to identify early any risks to your child's oral health.	• Make an appointment for child's first dental check-up by 1 year of age.
Early childhood 1-4 years		
1. How many teeth have erupted?	• By the age of 3, a child should have 20 teeth. Deciduous teeth are important to the development of permanent teeth.	• Help keep your child's teeth clean and healthy.

Trigger Questions	Take Home Messages	Anticipatory Guidance for Parents/ Caregivers
Early childhood 1-4 years		
2. Do you know when these teeth will be replaced?	• Your child's first permanent molar will erupt around the age of 5-6 years. Most children begin losing their baby teeth around the age of 6 till age of 12-13 when all permanent teeth erupt.	
3. Are you brushing your child's teeth? How has this been going?	• Parents must help to clean the child's teeth as young children have not acquired the fine motor control which is required for brushing.	• Brush child's teeth twice a day with a smear /pea-sized amount of fluoridated toothpaste (after breakfast and before bedtime).
4. Does your child drink from a cup? Does she drink from a bottle?	• Prolonged bottle feeding may lead to development of early childhood caries. • Injuries often occur in toddlers and young children as they learn to walk and explore their environment.	• Do not allow your child to walk around with the bottle or to drink from it for extended periods. These practices not only may lead to ECC, but children can suffer tooth injuries if they fall.
5. How often does your child snack? What does she usually eat for a snack?	• Frequent consumption of sugary foods and drinks promotes acid production and increases the risk for tooth decay. • Beware of hidden sugars.	• Promote good eating habits by providing a balanced healthy menu at mealtimes. • Limit foods and drinks containing sugar to mealtimes only. • Offer healthy snacks like fruit and vegetables in-between meals.

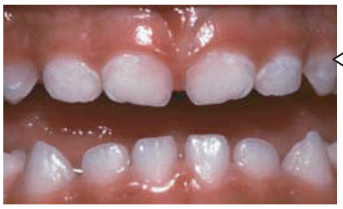
Trigger Questions	Take Home Messages	Anticipatory Guidance for Parents/ Caregivers
Early childhood 1-4 years		
6. Have you taken your child for a dental check-up? How often?	• White or brown spots on the front teeth are early signs of dental caries. • ECC if left undetected or untreated can cause pain, poor nutrition and developmental delays, even hospitalisation.	• Familiarise yourself with the normal appearance of your baby's gums and teeth so that you can identify problems if they occur. • Check your child's mouth at least once a month using the "Lift the Lip" technique to look for decay (white or brown spots) on the outside and inside surfaces of teeth.

CHECKING FOR EARLY CHILDHOOD CARIES

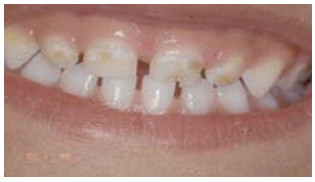
Early childhood caries (ECC) is a term used to describe dental caries in very young children. The disease affects the deciduous dentition and may present soon after dental eruption. It develops on smooth tooth surfaces and the upper incisors are usually affected first. The condition progresses rapidly and other teeth may soon be involved following the sequence of tooth eruption:

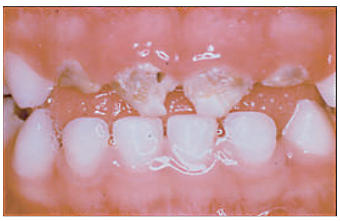
- Upper incisors
- Upper 1st molars
- Lower 1st molars
- Canines
- 2nd molars

The lower incisors are usually not involved because of protection by the tongue during sucking. Complete destruction of the deciduous dentition may occur by 30 months of age. The early carious lesions may be in the form of white spots/ lines/ patches (enamel demineralisation) that may later change to yellow (dentinal caries) and brown/ black (arrested caries).



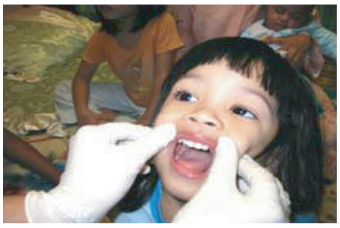
White/ yellow patches indicating signs of early childhood caries





Early childhood caries in a 3-year-old child. Brown cavitations and breakdown of the upper incisors are clearly visible

Knee-to-knee position
Younger children may be easily examined using the knee-to-knee position



"Lift the Lip" technique
Lifting a child's lip to look for decay on the outside and inside surfaces of the 4 upper front teeth should be performed once a month and can alert parents to early signs of tooth decay

Appendix 5

SENARAI SEMAK PEMANTAUAN AKTIVITI KESIHATAN PERGIGIAN DI TAMAN ASUHAN KANAK-KANAK (TASKA)

BAHAGIAN A

Nama taska	
Alamat	
No telefon	
Nama pengusaha taska /Alamat dan no tel	
Bil. guru sedia ada	
Bil. kanak-kanak yang diasuh	
Tarikh	

BAHAGIAN B

(Untuk dilengkapkan oleh guru yang bertugas)

Bil	Soalan
1	Sepanjang tempoh anda berkhidmat di TASKA, adakah anda pernah mendengar ceramah / menghadiri kursus mengenai Penjagaan Kesihatan Pergigian Kanak-kanak ? a. Ya (Nyatakan bila dan tempat): Tahun……di……. b. Tidak pernah
2	Apakah aktiviti-aktiviti kesihatan pergigian yang dijalankan oleh TASKA ini?

BAHAGIAN C

(Untuk diisi oleh Jururawat Pergigian)

Bil	Kategori	Perkara	Catatan/ Pemerhatian
1	PENDIDIKAN	Adakah TASKA ini mempunyai bahan-bahan pendidikan kesihatan pergigian seperti poster/ risalah dan lain-lain? a. Ya b. Tiada	
2	AMALAN KEBERSIHAN GIGI	Adakah TASKA ini menjalankan aktiviti pembersihan mulut kanak-kanak selepas menyusu/ makan? a. Ya b. Tidak	
3	KEMUDAHAN PENJAGAAN KESIHATAN GIGI	Adakah TASKA ini menyediakan tempat khas untuk kanak-kanak berkumur-kumur/ memberus gigi? a. Ada b. Tiada	
4	PEMAKANAN	Adakah penyediaan makanan di TASKA ini bebas gula? a. Ya b. Tidak	
5	KOMITMEN IBUBAPA	Sekiranya bekalan makanan dibawa dari rumah, adakah ianya bebas gula? a. Ya b. Tidak	
6	PEMERIKSAAN GIGI	Adakah aktiviti 'Lift the Lip' dijalankan di TASKA ini? a. Ya, secara berkala/ berjadual b. Ya, sekali sekala sahaja (Tiada berjadual) c. Tiada	

Nama Jururawat Pergigian : .....

Tempat Bertugas : .....

Tarikh : .....

Cadangan: Jumlah skor adalah berdasarkan kepada jumlah jawapan ‘ya’/ ‘ada’ daripada Bahagian C. Mana-mana TASKA yang mendapat skor di bawah dicadangkan menerima sijil berikut:

JUMLAH SKOR	Bilangan ‘star’ diperolehi	Sijil
0-1	-	-
2 - 4	3 (***)	Sijil Kesihatan Pergigian Sepanjang Hayat ***
5 - 6	5 (*****)	Sijil TASKA Cemerlang Kesihatan Pergigian Sepanjang Hayat *****

Appendix 6

UJIAN KESIHATAN PERGIGIAN

NAMA : _____
TEMPOH BERKHIDMAT : _____
TEMPAT BERKHIDMAT : _____
TARIKH : _____

Ujian ini mengandungi 10 soalan. Sila beri jawapan dalam masa 10 minit.

1. Bilangan gigi susu yang lengkap bagi seorang kanak-kanak berusia 5 tahun ialah 24 batang.
   a. Betul b. Salah

2. Gigi kekal yang lengkap bagi seorang dewasa ialah 36 batang.
   a. Betul b. Salah

3. Biasanya, gigi akan mula dibentuk ketika bayi berumur 6 bulan.
   a. Betul b. Salah

4. Pada kebiasaannya, gigi kekal mula tumbuh ketika kanak-kanak mencapai usia 9-10 tahun.
   a. Betul b. Salah

5. Cabutan gigi susu terlalu awal boleh menyebabkan gigi kekal tumbuh tidak teratur.
   a. Betul b. Salah

6. Karies gigi juga dikenali sebagai karang gigi.
   a. Betul b. Salah

7. Plak gigi adalah merupakan sisa-sisa makanan yang tertinggal lama di dalam mulut.
   a. Betul b. Salah

8. Tabiat berkumur-kumur selepas makan amat digalakkan kerana ia merupakan kaedah mudah dan berkesan untuk membuang plak gigi.
   a. Betul b. Salah

9. Kehilangan gigi di kalangan warga tua adalah perkara yang normal akibat kekurangan hormon dan proses penuaan.
   a. Betul b. Salah

10. Biasanya kerosakan gigi di kalangan ibu mengandung disebabkan kalsium pada gigi ibu diambil oleh anak yang dikandungi.
   a. Betul b. Salah

Selamat mencuba. Terima kasih

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- Officers and staff members of the Oral Health Division, Ministry of Health Malaysia