Guidelines on

Oral Healthcare for Pre-School Children

Oral Health Division
Ministry of Health
Malaysia

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GUIDELINES ON

ORAL HEALTHCARE

FOR PRE-SCHOOL CHILDREN

Oral Health Division
Ministry of Health Malaysia
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FOREWORD
BY THE DIRECTOR OF ORAL HEALTH
MINISTRY OF HEALTH MALAYSIA

Oral health personnel have carried out oral health activities for pre-school children since 1984. These activities have focused on oral health promotion and prevention with the objectives of creating oral health awareness at an early age and introducing children to oral health personnel and oral healthcare in a familiar and friendly environment.

Oral diseases are largely preventable. Nevertheless dental caries continue to be a major problem amongst pre-school children. It is hoped that with this early exposure to oral healthcare activities, the prevalence of oral diseases will be reduced in children and they would be more receptive to dental nurses rendering oral healthcare under the school dental services.

Both parents and pre-school teachers can go a long way towards helping us achieve our objectives of preventing dental diseases and achieving good oral health for all pre-school children. By implementing this programme in pre-schools anl involving teachers and parents in the activities planned, it is hoped that our objective of having 30% of our 6-year-old children free from any dental caries experience will become a reality by the year 2010.

DATO' DR. WAN MOHAMAD NASIR BIN WAN OTHMAN

1. INTRODUCTION

Pre-school children are one of the major target groups under the primary oral healthcare programme of the Ministry of Health. Oral healthcare for pre-school children is given due priority as their oral health will determine the oral health status of future generations.

Several large-scale dental epidemiological surveys of 5 to 6-year-old children have been conducted in Malaysia[1-8]. Findings show that caries prevalence in this group of children remains high although the rate is declining. In the latest studies, caries prevalence of 87.1% was noted among 5-year-olds[8] while in 6-year-olds, 80.6% had at least one or more carious teeth in the deciduous dentition[3]. For both groups, there was a very high level of unmet treatment needs.

A structured pre-school programme has been in place in Malaysia since 1984. This programme focuses on preventive and promotive activities for pre-school children attending kindergartens (*Taman Didikan Kanak-Kanak* or *tadika*). A systematic referral system is also in place for the referral of children requiring curative care to the nearest government clinic.

In 1992, strategies and guidelines to implementation of all oral health programmes and activities were outlined in the document entitled "Strategi Ke Arah Perkhidmatan Pergigian Yang Cemerlang dan Bermutu" [9]. In view of the many changes that have taken place since then, there is a need to review the existing pre-school programme and to formally document the guidelines for the implementation of this programme. This would also facilitate planning of resources for the programme.

2. BACKGROUND

Since its launch in 1984, the pre-school programme has been mainly a preventive and promotive programme, with the objective of creating awareness and inculcating positive oral health habits and attitudes.

Through three visits to identified kindergartens or pre-schools, dental nurses and other auxiliaries carry out activities, which include dental health talks and tooth brushing drills. For a pleasant and fun introduction to the clinical aspects of oral healthcare, role-play is also carried out on the third visit.

Through the years, implementation of the pre-school programme has seen some modifications. A kindergarten was previously considered "covered" when three visits were made. However, due to resource constraints, this was reduced to two visits in certain locales. This was supported by a local study, which found no difference in effectiveness between a two–visit and a three-visit programme[13].

In recent years, some districts took it a step further by undertaking the task of treating pre-school children as an outreach programme. Treatment has been made more acceptable to these younger children with the development of the minimally invasive technique of Atraumatic Restorative Treatment (commonly referred to as ART). This pre-school outreach programme was further facilitated with the establishment of pre-school teams under the 7th Malaysia Plan (1996 - 2000).

In August 2000, the Oral Health Division, Ministry of Health, organised a seminar on "Atraumatic Restorative Treatment in The Management of Dental Caries" in Kota Bharu, Kelantan. Participants, comprising dental officers and nurses, were trained to undertake ART in concurrent workshop sessions in local kindergartens. The guidelines to implementation of the ART programme[14] were adhered to. Similar workshops were organised at state level.

Through the pre-school programme, nearly 100% of government-aided kindergartens and pre-schools registered with the Ministry of Education are "covered" each year.

3. LITERATURE REVIEW

3.1 Demographic profile of dental caries and treatment needs in pre-school children

Dental epidemiological surveys of 5 to 6-year-olds conducted in Malaysia have shown high prevalence of caries, despite a declining trend for the last three decades. In 1970, the proportion of 6-year-olds with one or more carious teeth in the deciduous dentition was 95.4% in Peninsular Malaysia[1]. This decreased to 88.6% in 1988 and by 1997, a further decline to 80.6% was noted[2,3].

In a similar study in Sarawak in 1982, caries prevalence was 91.7% in the same age group[4]. By 1994, caries prevalence had dropped to 88.2% and this further declined to 79.6% three years later[3,5]. In a regional pre-school survey in 1995, the caries prevalence of 5-year-old children in Sarawak was found to be 85.8%, with 49.6% considered at high risk with 5 or more carious teeth[6]. Only 10.7% of affected teeth were restored, reflecting the high-unmet treatment needs seen elsewhere in Malaysia.

Among the regions, Sabah recorded the highest caries prevalence among 6-year-olds at 96.9% in 1985 and 94.7% in 1997. This indicates a very small decrease of 2.2% over the 12-year period[3,7].

In the 1995 pre-school survey, caries prevalence among 5-year-olds was 87.1%. The restorative index was a mere 2.6%, which indicates a high level of unmet treatment need. Furthermore, about 55% of these children were considered to be at high risk[8].

The most recent national survey of school children showed caries prevalence of 80.6% among 6-year-old subjects[3]. This age group also received the least amount of dental care with a restorative index of only 11.1%. When restorative index amongst 6-year-olds is considered by region, Sarawak ranks highest (30.8%), followed by Peninsula Malaysia

(10.5%) and Sabah (4.8%). These findings are consistent with the fact that the oral health programme for pre-school children in most parts of Malaysia was mainly preventive in nature.

Findings of high caries prevalence and a high level of unmet treatment needs were similarly reflected in several local studies on smaller samples. In a study done in Petaling Jaya, only 15.4% of 5-year-olds and 14.8% of 6-year-olds were caries-free [11]. The mean number of decayed and filled primary teeth (dft) was 5.5 for the 5-year-olds and 5.9 for the 6-year-olds. Another study conducted in Kuala Lumpur found the mean dft among the 6-year-olds to be 6.0. The ratio of decayed (d) to filled teeth (f) was 5.2:1. Caries prevalence increased from 59% among the 3-year-olds to 83% among the 6-year-olds [12].

3.2 Importance of a pre-school programme

Many studies have reported that health-related behaviours are established in the pre-school years during the period of primary socialisation[15-18]. Good management of the pre-school child is essential. This leads to a motivated patient, happy to undergo any treatment necessary, encourages confidence and improves attitudes to oral health of other family members[15]. There is evidence that consideration of past dental history may be used as a reliable caries-risk predictor[19].

A field study evaluating a new strategy for dental care of pre-school children showed that early primary prevention (before the onset of caries attack) and a structured and systematic approach to dental care for pre-school children result in good oral health for the children and may be economically profitable for a society with organised public dental service for pre-school children[20].

Dental caries among pre-school children remains a significant dental public health problem in the United Kingdom (UK). The well-developed and extensive treatment and preventive services in the UK have failed to effectively prevent caries in a significant proportion of pre-school children,

especially within disadvantaged communities. Recognising this, the development of an innovative national oral health promotion programme has been planned, which target the carers of pre-school children attending day-care facilities. There is particular emphasis on development of policies and guidelines in day care settings that promote oral health. Two of the key features are the integration of oral health and nutrition, and cooperation across sectors and professional disciplines[21].

In Singapore, it was recently reported that about half of the children entering primary school had some degree of tooth decay in their baby teeth. To combat this problem the Health Promotion Board (HPB) of Singapore held an awareness programme at 200 kindergartens over three days, which targeted parents and teachers to drive home the importance of good oral healthcare[22].

3.3 Importance of the teacher's role

Various studies on pre-school programmes have shown that teacher involvement contributes enormously to the prevention of oral diseases in pre-school children[13, 23-25]. The best results are achieved in schools with the highest standard of cooperation and communication between dentists and teachers[23].

A study conducted in Johor Bahru, concluded that teacher involvement in supervising daily tooth brushing is more important in reducing plaque scores than the number of visits made by oral health professionals[13].

The importance of good cooperation and communication between dentist, teachers and parents, the teacher as a role model and using good pedagogical approach for effective preventive programmes, all underline the need for teachers to be dentally aware and committed towards the well being of her charges[23,24]. It has also been recommended that public education targeted at teachers should be carried out to increase oral trauma management awareness[25].

3.4 Importance of parents' / carers' role

Rayner (1992) showed that the combination of tooth brushing in schools and dental education to parents improved the oral hygiene of the children[26]. Cohen (1980) suggested that it is important to give advice to parents and children in the same environment[27]. More emphasis should be put on the teaching of correct tooth brushing skills and on positive parental involvement[28].

3.5 Health promotion activities for pre-school children

A recent newspaper article on parenting noted that it is important to explain things graphically to children[29]. They must also understand the reasons for taking care of their teeth. They only understand what a filling is from the age of five or six. For the under-sixes, motivation is probably more important than comprehension. Parents are the natural role models for very young children. It was recommended that parents should brush their teeth with their children. In addition to this, to ensure effective cleansing, parents should brush the child's teeth again.

A special model for dental care in pre-school children was used in a study in Sweden[30]. In this model, children were screened for caries risk. It was found that lack of oral hygiene (visible plaque), deep fissures in molars and frequent intake of sweet drinks were risk factors for caries**.** Following this, individual caries prevention was given, including fluoride, antimicrobial treatments as well as fissure sealants in primary molars at risk. The results suggest that this model for caries prevention in pre-school children is cost-effective, and that dental health of children can be improved.

3.6 Prioritising government kindergartens/ pre-schools

Parental socio-economic characteristics have been shown to be strongly associated with the dental caries status of pre-school children. Social factors were undoubtedly the strongest determinants of caries experience[31]. The social differences were of prime concern rather than measures of ethnicity[32]. In one study it was found that the percentage of children at age 5 to 6 years who had no caries experience was 48.3% for private nurseries compared to only 28.2% for public nurseries [33].

Higher percentages of caries-free (dft=0) children were found in urban areas in the pre-school surveys [6,8]. In the 1995 pre-school survey, the percentage of caries-free children in the urban areas was 17.4% compared to 8.1% in the rural areas. Likewise, percentage of subjects having 5 or more teeth with caries experience was higher in the rural areas (65.2%) compared to urban areas (43.7%).

3.7 Coverage of kindergartens under the pre-school programme (1995 to 1999)

The evaluation report of oral health programmes under the Modified Budgeting System (MBS) showed that the number of pre-school children seen increased 18% over five years from 1995 to 1999[34]. In the same period, the coverage of pre-schools increased 17%. This increase was greater in private kindergartens (25%) compared to government ones (15%). In 1999 more than 94% of government and government-aided kindergartens were covered. However, this constituted only about 33% of the pre-school population. The number of dental nurses in pre-school teams increased 364% in the same period of time, improving the ratio of dental nurse to pre-school population from 1:40,494 to 1:9,913 by 1999. However, these dental nurses were also deployed for the school dental service.

4. RATIONALE

With only 12.9% of 5-year-olds being caries-free (1995), Malaysia still lags behind the Oral Health Goal of 50% caries-free children (5 to 6-year-olds) for the year 2000 set by the World Health Organisation (WHO)[6]. Similarly, the proportion of caries-free 6-year-olds at 19.1% is below the 30% target set in the Oral Health Goals, Year 2000 for Malaysia[10]. In spite of a programme for pre-school children since 1984, these findings show that dental caries among pre-school children is a significant dental public health problem in Malaysia, especially within the rural communities. The high level of unmet treatment needs among these children also need to be addressed.

While contemplating expansion of the scope of the pre-school programme, other factors also have to be considered – namely, the rapid increase in school enrolment as compared to the availability of trained operating personnel, as well as other programmes competing for limited financial and human resources.

There is thus a need to review the existing pre-school programme, bearing in mind these factors, and to develop an innovative national oral health promotion programme for pre-school children. Diet and nutrition play an important role in the oral health of pre-school children. Therefore, the activities in the pre-school programme should also target the teachers and carers of pre-school children, with special emphasis on the integration of oral health and nutrition and the incorporation of the much-needed curative component.

Working within resource constraints, early primary prevention and a structured and systematic approach to oral healthcare for the pre-school children can yield good oral health for these children. This will have an impact on oral health in the years ahead and be economically profitable in the long run.

5. SCOPE

This programme covers pre-school children of 5 to 6 years of age, attending kindergartens and pre-schools. The services include promotive, preventive and curative activities towards the control of oral diseases. Priority will be given to government-aided kindergartens, and if resources allow, will be extended to private kindergartens.

6. OBJECTIVES

6.1 General Objective

To instill oral health awareness so as to maintain good oral health amongst children of pre-school age.

6.2 Specific Objectives

6.2.1 To enable pre-school children to maintain good oral hygiene.

6.2.2 To ensure pre-school children are receptive to oral health personnel and oral healthcare.

6.2.3 To control the occurrence of oral diseases in pre-school children.

6.2.4 To enable teachers and carers to provide healthy food choices.

7. METHODOLOGY

7.1 Strategies for Implementation

In order to achieve the objectives of the programme, the following strategies are identified:

7.1.1 Introducing pre-school children to oral healthcare environment in a friendly manner.

7.1.2 Working together with teachers and carers, including parents, in the activities planned.

7.1.3 Encouraging tooth brushing drills (TBDs) in kindergartens.

7.1.4 Conducting oral health educational activities to impart knowledge and skills.

7.1.5 Extending outreach services to increase coverage of pre-school children.

7.1.6 Providing early clinical intervention, wherever necessary, to control oral diseases.

7.1.7 Training of personnel in implementation of the pre-school protocol.

7.1.8 Monitoring and evaluation of activities on a regular basis.

7.2 Operational Procedures

The operational procedures in the implementation of a two-visit pre-school programme are as follows:

Table 1: Operational Procedures for Pre-school Programme

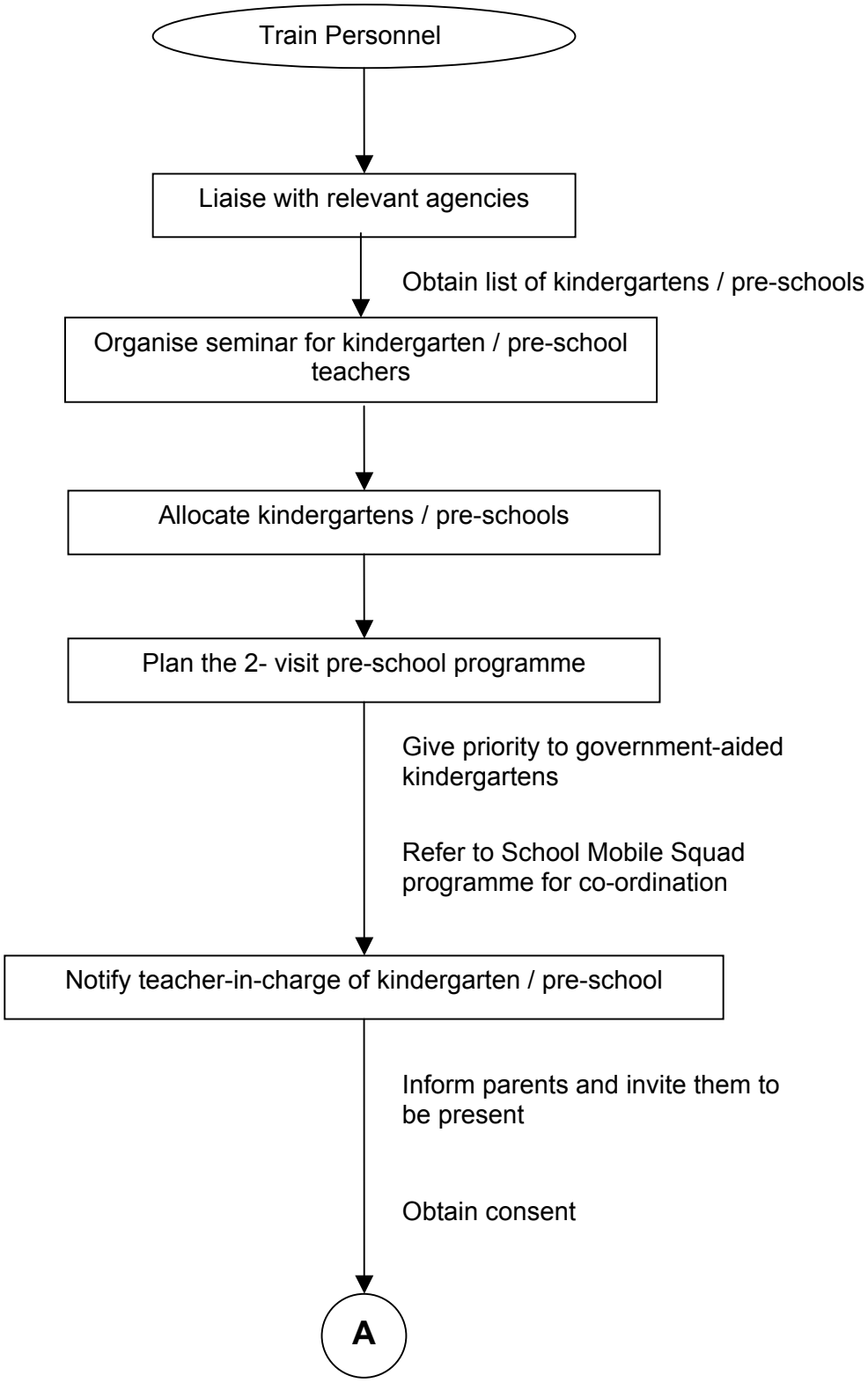
No.	Item	Responsibility
7.2.1	Train personnel (national/ state/ district level) in the following: a. Protocol on Oral Healthcare for Pre-school Children b. Other relevant modules: • Atraumatic Restorative Treatment in the Management of Dental Caries (Guidelines to implementation) • School-Based Fissure Sealant Programme Protocol	Principal Assistant Director/ Dental Public Health Officer/ Senior Dental Officer (SDO)/ Matron

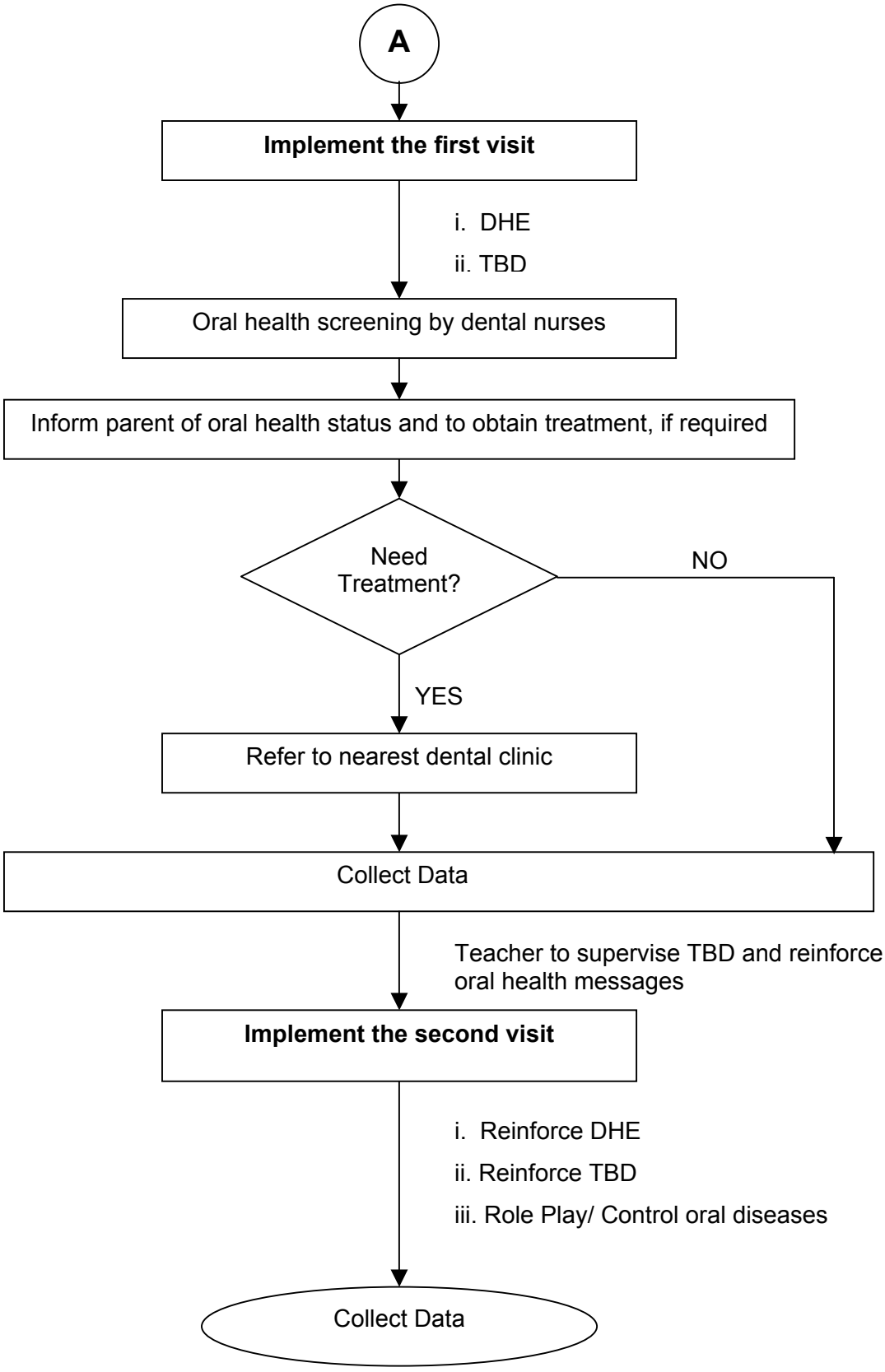
No.	Item	Responsibility
7.2.2	a. Liaise with relevant agencies: i. District Education Office ii. *Jabatan Kemajuan Masyarakat* iii. *Jabatan Perpaduan Negara* iv. *Jabatan Agama Negeri* v. Others b. Obtain list of kindergartens (government and private) and pre-schools in the district.	SDO/ Sister
7.2.3	Organise seminar for pre-school and kindergarten teachers. (Appendix I)	SDO
7.2.4	Allocate workload between main dental clinic and other clinics in the district, according to enrolment and accessibility.	Sister
7.2.5	**Plan the 2-visit programme** a. The two visits should be spaced out within a period of 1 to 3 months, depending on the availability of manpower. b. Where a primary school has a pre-school class, the visit to the pre-school can be planned in conjunction with the visit to the school.	Dental Officer-in-charge/ Sister
7.2.6	a. Notify teacher-in-charge of the programme schedule. (Appendix II – Letter to inform teacher of visit) b. Encourage parents to be present at both visits. (Appendix III – Letter to inform parents of visit)	Dental Nurse
7.2.7	**The first visit** a. Conduct dental health education (DHE) activity (Appendix IV - DHE) b. Conduct Tooth Brushing Drill (TBD)	Dental Nurse

No.	Item	Responsibility
	(Appendix V - TBD) c. Do oral health screening and inform parents of oral health status of the child (Appendix VI - Oral health screening) (Appendix VII - Letter to inform parents of oral health status of child and to obtain treatment, if required)	
7.2.8	Collect data - Update checklist for coverage of kindergartens (Appendix VIII - *Senarai Semak Lawatan Tadika/ Pra-sekolah*)	Dental Officer-in-charge/ Sister
7.2.9	Supervise regular TBD for pre-school children and reinforce oral health messages.	Teacher-in-charge
7.2.10	**The second visit** a. Reinforce DHE or other health promotion activities (Appendix X) b. Reinforce TBD c. Conduct role-play (Appendix IX) or control of oral diseases (if within resource constraints)	Dental Nurse
7.2.11	Control oral diseases (if within resource constraints) a. Request teacher for part of the classroom or an adjoining room to be converted into a treatment area. b. Introduce simple and painless (atraumatic) oral health care, e.g. topical fluoride application, glass-ionomer sealants (for permanent molars) and ART restorations. (Children requiring extractions and more complicated treatment should be referred to the nearest dental clinic.)	Dental Nurse

No.	Item	Responsibility
7.2.12	Collect data a. Update checklist for coverage of kindergartens b. Record HMIS formats	Dental Nurse

7.3. Flow-Chart for Implementation of Pre-school Programme




A
Implement the first visit
i. DHE
ii. TBD
Oral health screening by dental nurses
Inform parent of oral health status and to obtain treatment, if required
Need Treatment?
NO
YES
Refer to nearest dental clinic
Collect Data
Teacher to supervise TBD and reinforce oral health messages
Implement the second visit
i. Reinforce DHE
ii. Reinforce TBD
iii. Role Play/ Control oral diseases
Collect Data

8. MONITORING AND EVALUATION

The SDO shall be responsible for the monitoring and evaluation of the pre-school programme at district level. Monitoring and evaluation of the programme shall look at HMIS output data and other relevant sources as shown in the tables below:

8.1 Monitoring

Monitoring of the pre-school programme is carried out to ensure activities are being implemented as planned and to determine performance at clinic/ district level.

Table 2: Indicators for Monitoring of Pre-school Programme

No.	Indicators	Data Source
1.	Number (percentage) of kindergartens covered	Appendix VIII
2.	Number (percentage) of pre-school children exposed to DHE/ TBD/ Role-play	PKP 201/ PKP 202
3.	Workload	PG 307/ PG 201
4.	i. Number of permanent molars fissure sealed ii. Number of ART restorations done	PG 201
5.	Percentage of Year 1 children accepting dental treatment	PG 201
6.	Percentage of kindergartens with teachers trained at oral health seminar	Attendance List at Seminar

8.2 Evaluation

Evaluation of the programme is carried out on a regular basis to determine whether the objectives have been achieved. The following indicators are used to measure equitable distribution of services and appropriateness, acceptability and effectiveness of activities implemented.

Table 3: Indicators for evaluation of Pre-school Programme

No.	Indicators	Data Source
1. 1.1	**EQUITABLE DISTRIBUTION** **Number of kindergartens & enrolment (district/state/national)** a. Number of kindergartens (district / state) b. Enrolment (district / state)	PKP 203
1.2	**Distribution of pre-school teams by district/ state** **Number of pre-school teams** a. Number of pre-school teams approved under Malaysia Plans b. Enrolment of kindergartens c. Ratio of pre-school teams to enrolment = (a:b)	Development Projects
1.3	**Coverage of kindergartens** a. Government b. Private c. Government & Private i. Number of kindergartens covered ii. Number of kindergartens in district/ state iii. Percentage of kindergartens covered = (i/ii x 100)	PKP 203
1.4	**Coverage of pre-school children** a. Government b. Private c. Government & Private i. Enrolment of children in kindergartens covered ii. Enrolment of all kindergartens in district/ state iii. Percentage of pre-school children covered = (i/ii x 100)	PKP 203
1.5	**Ratio of dental nurses to pre-school children** a. Number of dental nurses b. Total number of pre-school children c. Ratio of dental nurses to pre-school children = (a:b)	Posting Report
2. **2.1**	**APPROPRIATENESS** **Percentage of Year 1 children with gingivitis-free mouths** i. Number of Year 1 children with gingivitis-free mouths ii. New attendances for Year 1 children	PG 201

No.	Indicators	Data Source
	iii. Percentage of Year 1 children gingivitis-free = (i/ii x 100)	
2.2	**Percentage of new attendances for pre-school children** i. New attendances for pre-school children ii. Enrolment of pre-school children iii. Percentage new attendances = (i/ii x 100)	PG 201
3.	**ACCEPTABILITY**	
3.1	**New attendances for pre-school children** i. New attendances for pre-school children ii. Enrolment of pre-school children iii. Percentage new attendances = (i/ii x 100)	PG 201 / 206
3.2	**Total attendances for pre-school children** (New and old cases)	PG 201 / 206
3.3	**Pre-school children doing daily TBD** i. Number of pre-school children doing daily TBD ii. Enrolment of pre-school children in district/ state iii. Percentage of pre-school children doing daily TBD = (i/ii x 100)	PKP 201 Col.7
4. **4.1**	**EFFECTIVENESS** **Percentage of Year 1 children with Caries-free mouth (CFM)** a. Number of Year 1 children with CFM b. New attendances for Year I c. Percentage Year 1 children with CFM = (a/b x 100)	PG 201
4.2	**Percentage of Year 1 children Caries Free (CF)** a. Number of Year 1 children CF b. New attendances for Year I children c. Percentage Year 1 children CF = (a / b x 100)	PG 201
5.	**Output and outcome assessment, shortfalls and constraints**	Annual status report of pre-school prog. OHD

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Appendix I

PROCEDURES IN ORGANISING SEMINAR FOR PRE-SCHOOL TEACHERS

1. INTRODUCTION

One of the functions of the dental team is organising a seminar for kindergarten and pre-school teachers. This document describes the procedures to follow in organising this activity at district or state level. To facilitate implementation, examples of a seminar programme and topics for discussion/ lectures and working groups are also included.

2. OBJECTIVES

2.1 To create awareness among teachers of their role in promoting good oral health in pre-school children

2.2 To gain teachers' involvement and cooperation in inculcating good oral habits among pre-school children

2.3 To enable teachers to make decisions on healthy food choices

2.4 To enable teachers to carry out oral health promotion activities as part of their teaching curriculum

3. PROCEDURES

No.	Item	Responsibility
3.1	3.1.1 Identify target group (government or private kindergartens or combine both) and the coverage (zones or whole district), if in a large district. 3.1.2 Liase with relevant agencies: a. *Jabatan Kemajuan Masyarakat* b. *Jabatan Perpaduan Negara* c. District Education Office d. *Jabatan Agama Negeri* e. *Persatuan TASKA Negeri* f. Non-governmental organisations 3.1.3 Send call letter to identified agencies for 1st meeting to discuss details concerning seminar.	Senior Dental Officer (SDO) Administrative Assistant
3.2	First Meeting - Chairperson: SDO 3.2.1 Establish working committee, comprising of dental personnel and representatives from various agencies. 3.2.2 Explain objectives of seminar and the proposed programme.	SDO

No.	Item	Responsibility
	3.2.3 Discuss the following: a. Date of seminar b. Venue for seminar c. VIP for officiating (optional) d. Number and names of participants e. Job-distribution (forming of sub-committees, involving representatives from invited agencies) i. Food ii. Souvenirs, programme book and certificates of attendance iii. Facility / audio-visual aids / PA system iv. Reception/ registration f. Costing 3.2.4 Set date and time for 2nd meeting 3.2.5 Minutes for 1st meeting to be circulated 3.2.6 Send call letter for 2nd meeting at least one week before date of meeting.	Secretary
3.3	Submit proposal to state Deputy Director of Health (Dental) for approval	SDO
3.4	2nd Meeting - Chairperson: SDO 3.4.1 Confirm date and venue of seminar 3.4.2 Obtain feedback on preparations from heads of sub-committees 3.4.3 Finalise list of participants 3.4.4 Finalise costing	SDO Heads of sub-committees
3.5	Preparation for the seminar	Sub-committees
3.6	Evaluation of seminar 3.6.1 Evaluation by participants 3.6.2 Actual costing	SDO / Dental Public Health Officer

EXAMPLE OF A SEMINAR PROGRAMME

Time	Programme
8.15 - 9.00 am	Registration of participants/ Visit to oral health exhibition
9.00 - 9.30 am	Oral health talk I
9.30 - 10.00 am	Tea break
10.00 - 10.30 am	Oral health talk II
10.30 - 11.00 am	Tooth brushing demonstration
11.00 - 11.15 am	Briefing of working groups
11.15 - 1.00 pm	Working group activity begins
1.00 - 2.00 pm	Lunch break
2.00 - 3.00 pm	Working group activity (continues)
3.00 - 4.00 pm	Presentation of working group activities
4.00 - 4.30 pm	Presentation of certificates of participation Closing ceremony

SUGGESTED TOPICS FOR ORAL HEALTH TALKS TO

KINDERGARTEN / PRE-SCHOOL TEACHERS

1. Optimum Oral Health and Oral Health Problems
    - Importance of optimal oral health for general health
2. "Smile for Life"
    - Ways to preserve that winning smile
    - Dental diseases – dental caries and periodontal diseases; ways to prevent these diseases
    - Role of diet and nutrition in oral health
3. "*Prevention is better than cure*"
    - Dental diseases – dental caries and periodontal diseases; ways to prevent these diseases
    - Role of diet and nutrition in oral health
4. Role of the kindergarten /pre-school teacher in promoting oral health of the pre-school child.
    - Topics emphasising the important role teachers play in promoting oral health of the pre-school child and in ensuring the success of the pre-school programme.

SUGGESTED TOPICS FOR WORKING GROUP ACTIVITIES

Working Group 1

Prepare a 2-week menu for the mid-morning snack for pre-school children. The menu should comprise food that is nutritious and non-cariogenic.

Working Group 2

Discuss how teaching modules/ lesson plans may be used to incorporate oral health messages for pre-school children.

Working Group 3

Discuss the role of sugary foods in the oral health of pre-school children. List out:

a. Ways to reduce the harmful effects of sugar consumption on oral health
b. Foods with hidden sugars
c. Ways to teach pre-school children in making healthy food choices

Working Group 4

The kindergarten under your care is planning a regular tooth brushing activity.

Discuss the possible problems that may arise while carrying out this activity in the kindergarten and how it may be possible to overcome them.

Working Group 5

Suggest a design for a toothbrush/ tumbler rack for the children in a pre-school/ kindergarten. The rack should have the following features:

a. Be able to accommodate all the toothbrushes for one class of children
b. Should have a free circulation of air
c. Children could easily identify their own toothbrush
d. Affordable and of recyclable material

Working Group 6

Discuss how involvement of parents and carers/ teachers can help in caring for the teeth of the pre-school child.

Appendix II

KLINIK PERGIGIAN BESAR
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……
…….

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Fax:
E- mail:

Ruj. Tuan:

Ruj. Kami:

Tarikh:

GURU TADIKA

……..

……

Tuan / Puan,

LAWATAN KE TADIKA

Adalah dengan hormatnya saya merujuk kepada perkara di atas.

2. Sukacita dimaklumkan bahawa Pasukan Pergigian Bergerak Pra-Sekolah bercadang melawat ke tadika tuan/ puan untuk menjalankan aktiviti promosi kesihatan pergigian pada tarikh yang berikut :

LAWATAN 1: ……

LAWATAN 2: …….

3. Sukacita sekiranya tuan/puan dapat mengesyorkan murid-murid membawa cawan dan berus gigi untuk aktiviti latihan memberus gigi di tadika. Bersama-sama ini disertakan Borang PG 307 untuk diisikan maklumat murid-murid.

4. Kerjasama tuan/puan sangat-sangat kami harapkan dan diucapkan setinggi-tinggi terima kasih.

Sekian, untuk makluman dan tindakan tuan/puan.

"SENYUMAN MANIS SEUMUR HIDUP"

Saya yang menurut perintah,

……
(NAMA PEGAWAI PERGIGIAN)
Pegawai Pergigian Kanan/ Y/M

Appendix III

KLINIK PERGIGIAN BESAR
……..
……
……
……..

☎
Fax:
E- mail:

IBU BAPA / PENJAGA

TADIKA: …….

Tuan / Puan,

LAWATAN KE TADIKA

Adalah dengan hormatnya saya merujuk kepada perkara di atas.

2. Sukacita dimaklumkan bahawa Pasukan Pergigian Bergerak Pra-Sekolah bercadang melawat tadika anak tuan/ puan untuk menjalankan aktiviti promosi kesihatan pergigian pada tarikh yang berikut :

LAWATAN 1: ……

LAWATAN 2: …….

3. Tuan/ puan adalah dijemput hadir bersama pada tarikh yang ditetapkan untuk lebih memahami penjagaan kesihatan mulut anak. Tuan/puan juga diminta membekalkan anak dengan cawan dan berus gigi untuk dibawa ke tadika bagi memudahkan aktiviti latihan memberus gigi.

4. Kehadiran tuan/puan sangat dialu-alukan.

Sekian, terima kasih.

"SENYUMAN MANIS SEUMUR HIDUP"

Saya yang menurut perintah,

……..

(NAMA PEGAWAI PERGIGIAN)
Pegawai Pergigian Kanan/ Y/M

Appendix IV

DENTAL HEALTH EDUCATION

1. INTRODUCTION

Dental health talks are given by dental nurses on the first visit to the kindergarten or pre-school. This session serves to introduce children to oral health personnel in their own familiar surroundings. The short talk also explains why it is important to care for their teeth and how they can do that.

2. OBJECTIVE

At the end of this activity the children should be able to:

1.1 Explain the importance of their teeth

1.2 Take good care of their teeth

1.3 Practise good oral health habits

3. WORK PROCESS

3.1 Ensure suitable place is available for dental health talk.

3.2 Prepare appropriate audio-visual aids e.g. flip charts, posters, models or slides.

3.3 Group the children and note the number present. If the group is too large, divide the children into smaller groups for different activities.

3.4 Give dental health education.

3.5 Record activity in PKP 101 Pin. 2/92 for daily and monthly work returns.

4. DENTAL HEALTH EDUCATION TOPICS TO COVER

4.1 HOW TO LOOK AFTER YOUR TEETH

a. Brush your teeth daily after meals and at night before bedtime.

b. Rinse your mouth after eating.

c. Reduce intake of sweet food or drinks.

d. Have a dental check-up at least once a year.

4.2 FOODS THAT ARE BENEFICIAL TO ORAL HEALTH

Demonstrate types of foods that are good for oral health, through the use of flip-charts/posters/models showing nutritious and balanced meals, food pyramid, fruits, cereals and nuts, etc.

4.3 REDUCE INTAKE OF SUGARY FOODS

Foods with sugars can cause harm to your teeth. Show these types of foods through flip charts and models of the following:

- Sweets/candies
- Cakes
- Chocolates
- Ice-cream
- Fizzy/ carbonated drinks

Appendix V

TOOTH BRUSHING DRILL

1. INTRODUCTION

Children aged 6 years and below, do not have the manual dexterity to perform adequate tooth brushing for proper plaque removal. Their parents or carer should supervise the brushing and complete the process by brushing the child's teeth. This supervision should continue until the child has mastered the proper technique. Children should be taught to systematically clean every tooth surface that is. the outer, inner and biting surfaces of upper and lower teeth to ensure effective brushing.

2. OBJECTIVE

At the end of this activity, pre-school children should be able to maintain good oral hygiene by practising systematic tooth brushing.

3. WORK PROCESS

3.1 Schedule tooth brushing drill (TBD) for 1st and 2nd visit to the kindergarten.

3.2 Prepare the following equipment:

- Typodent model and toothbrush
- Toothpaste and plastic cups for mouth rinsing
- Pail of clean water and a water scoop
- Plaque disclosing tablets
- Standing mirror of child's height/ face mirror
- Tooth brushing chart/ poster

3.3 Carry out TBD after dental health education/ talk.

3.4 Involve class teacher in the activity.

3.5 Group children outside classroom in a suitable location for example, near a sink or drain.

3.6 Distribute a toothbrush to each child.

3.7 Dispense toothpaste (pea-size) to every child.

3.8 Give instructions on use of plaque disclosing tablets and dispense one to each child.

3.9 Carry out TBD.

3.10 Check effectiveness of tooth brushing with children by encouraging them to look into the mirror.

3.11 Reinforce tooth brushing instructions and technique if tooth brushing is unsatisfactory.

3.12 Send children back to their classroom.

3.13 Record activity in PKP 101 Pin. 2/92 for daily and monthly work returns.

ORAL HEALTH SCREENING

1. INTRODUCTION

Oral health screening provides oral health personnel an avenue to assess the oral health of pre-school children. This activity may be conducted as cursory oral screening or as complete oral examination and charting depending on circumstances, for example, availability of consent, resource constraints and so on.

2. OBJECTIVES

2.1 At the end of this activity, pre-school children should be receptive to oral health personnel and oral healthcare.

2.2 Necessary actions will be taken by parents and oral health personnel to control oral diseases in pre-school children.

3. WORK PROCESS

Activity	Responsibility
3.1 Check that consent for examination has been given. • If consent has not been obtained, get consent signed if possible. For non-consent cases, do only cursory oral screening. 3.2 Obtain and record relevant medical and dental history from parent (if present) or teacher. 3.3 Enquire if child has any oral or dental complaints. 3.4 Do oral examination and dental charting on treatment card. The level of oral hygiene should also be noted. 3.5 Refer the child to the nearest dental clinic for treatment, if required. Any child with cleft lip/palate (repaired or otherwise) should also be referred to the orthodontic clinic for regular dental review.	Dental Nurse

PASUKAN BERGERAK PRA-SEKOLAH
KLINIK PERGIGIAN _____
DAERAH _____
NEGERI _____

☎
Fax:
E-mail:

Tarikh : .....

IBU BAPA / PENJAGA

Nama Murid : .....

Tadika: .....

Tuan / Puan,

STATUS KESIHATAN PERGIGIAN

Adalah dengan hormatnya saya merujuk kepada perkara di atas.

2. Sukacita dimaklumkan, semasa aktiviti promosi kesihatan pergigian di tadika, didapati anak jagaan tuan/puan mempunyai taraf kesihatan mulut seperti berikut :

Status	**Ulasan**
A	Keadaan mulut bersih dan memuaskan. 'Tahniah' diucapkan. Harap kebersihan gigi dapat dikekalkan. Lawatan pemeriksaan di klinik pergigian disyorkan satu tahun sekali.
C	Keadaan mulut adalah kurang memuaskan dan memerlukan rawatan pergigian.
E	Keadaan mulut tidak memuaskan dan memerlukan rawatan segera. Sila pastikan anak anda mendapat rawatan di klinik yang berhampiran.

3. Tuan / Puan boleh mendapatkan penerangan terperinci berkaitan kesihatan pergigian dan rawatan di klinik kerajaan dengan membawa anak anda ke:

Klinik Pergigian .....

Alamat: ..... Telefon:.....

Tarikh: ..... Masa: .....

4. Tuan / Puan juga diminta membawa sijil lahir anak anda untuk memudahkan urusan pendaftaran.

Kerjasama tuan/puan amatlah diharapkan.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan tugas,

.....
(NAMA JURURAWAT PERGIGIAN)

SENARAI SEMAK LAWATAN TADIKA / PRA-SEKOLAH

Klinik: _____ Tahun: _____

Bil	Nama Tadika / Pra-Sekolah	K	S	Enrolmen	Tarikh Lawatan I	Tarikh Lawatan II	Catatan

K: Tadika Kerajaan
S: Tadika Swasta

ROLE-PLAY

1. INTRODUCTION

Role-play is an activity that allows pre-school children to play the roles of 'dentist' and 'patient'. Through this fun interaction, the children are exposed to the simple clinical procedure of oral health screening. They also get to view the oral cavity and teeth/diseased teeth. At the same time it allows oral health personnel to make a quick assessment of the oral health status of the children.

2. OBJECTIVE

At the end of this activity, pre-school children should be receptive to oral health personnel and oral healthcare.

3. WORK PROCESS

Activity		Responsibility
3.1	Explain to children how activity will be carried out.	Dental Nurse
3.2	Invite two children to take on the roles of dentist and patient.	
3.3	The child who plays the role of patient is seated on a chair while the other child is dressed up as a dentist in white overalls, facemask and gloves.	
3.4	The child plays the role of dentist by examining the 'patient's' mouth using a torchlight and mouth-mirror. • The 'dentist' will count the number of teeth in the 'patient's' mouth. • The dental nurse will point out the differences in various teeth. • At the same time the dental nurse will note the following: o Whether the child requires any dental treatment.	

Activity	Responsibility
○ Any child with cleft lip/palate (repaired or otherwise). These children should be referred to the orthodontic clinic for regular dental review. 3.5 Repeat the session with other children in turn.	

HEALTH PROMOTION ACTIVITIES FOR PRE-SCHOOL CHILDREN

Health promotion activities are carried out during the scheduled visits to identified kindergartens/pre-schools. The main activities include dental health education, tooth brushing drills, oral health screening by dental nurses and role play. To add fun and interactivity to the programme, other activities may also be carried out. These include:

1. Puppet shows
2. Games
3. Oral health quiz
4. Jigsaw puzzles
5. Activity sheets
6. Story-telling
7. Magic shows/ ventriloquism
8. Clowning
9. Singing
10. Telematch
11. Conducted tours / visits to dental clinic with teachers
12. Competitions e.g.
    a. Toothbrush rack design
    b. Healthy teeth & beautiful smiles
    c. Colouring
13. Certificates of Appreciation to kindergartens that conduct daily tooth brushing drills

THE WORKING COMMITTEE

Advisor	Datin (Dr.) Rohani bt Ramli Director of Oral Health, Ministry of Health Malaysia
Chairman	Dato' (Dr.) Wan Mohamad Nasir bin Wan Othman Deputy Director of Oral Health, Ministry of Health Malaysia
Co-ordinator	Dr. Zubaidah bt. Ahmad Principal Assistant Director Oral Health Division, Ministry of Health Malaysia
Joint Secretaries	Dr. Chew Yoke Yuen Principal Assistant Director Oral Health Division, Ministry of Health Malaysia
	Dr. Loh Kim Hong Senior Dental Officer Kota Tinggi, Johore
Members	Dr. Noralaini bt. Ismail Dental Public Health Officer Kampung Pandan Dental Clinic, FTKL
	Dr. Amdah bt. Mat Dental Public Health Officer Banting Dental Clinic, Selangor
	Dr. Ow Chiew Koon Senior Dental Officer Prai Selatan, Penang
	Dr. Salmiah bt. Bustanuddin Principal Assistant Director Oral Health Division, Ministry of Health Malaysia
	Dr. Noor Aliyah bt. Ismail Principal Assistant Director Selangor Dental Department