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ORAL HEALTHCARE FOR ANTENATAL MOTHERS

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FOREWORD

Recognising the important role of mothers in imparting oral health knowledge and in influencing the attitude and practice of other members of the family, they are considered as agents of primary socialization. Thus, an oral health programme has been targeted towards antenatal mothers.

The main objective of this programme is to create awareness among antenatal mothers on the importance of oral health and to empower them towards self-care, and in attaining good oral health for themselves and their families. Nevertheless, it has been observed that there has been very poor uptake of oral healthcare services among the antenatal mothers.

There is therefore a need to direct and intensify oral health promotion efforts and to overcome perceived barriers to utilisation of oral healthcare among the antenatal mothers. It is envisaged that this guideline will facilitate standardised and systematic implementation of the oral healthcare programme for the antenatal mothers. It is hoped that this will lead towards improved utilisation of oral healthcare services among antenatal mothers.

I take this opportunity to express my warm appreciation for the commendable efforts of the committee involved in the preparation of this guideline.

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ORAL HEALTHCARE FOR ANTENATAL MOTHERS

1. INTRODUCTION

Mothers in general, play a very important role in imparting oral health knowledge and in influencing attitude and practice of other members of the family. In recognising this role, antenatal mothers form one of the target groups for an oral health programme under the Ministry of Health.

To further strengthen this programme, the Director General of Health's Circular Number 1/1990 states that dental health education and comprehensive treatment should be given to all antenatal mothers attending family and health clinics. This circular has been adopted as part of the Inspectorate System of the Ministry of Health (1990).

Based on utilisation figures from Health Management Information System (HMIS) data from 1996 to 2002[1], less than a quarter of antenatal mothers attending Maternal and Child Health (MCH) Clinics have benefited from the oral healthcare programme. There is a need to create greater awareness of oral health and to improve utilisation of oral health services among antenatal mothers.

In view of this, standard guideline on the oral health programme for antenatal mothers is develop with the aim to improving the utilisation of dental services among this group and thus optimising their potential role in oral health improvement for their families and the community.

2. BACKGROUND

An oral health programme for antenatal mothers has been in place since the early 1970s. Antenatal mothers attending MCH clinics for their check-ups are referred to the dental clinic for an oral health examination and oral health education (OHE). Mothers who are examined are either given immediate treatments or appointments.

Data from the HMIS shows that the uptake of oral health services among the antenatal mothers is low as indicated in the **Table 1** below.

Table 1 : Attendances of Antenatal Mothers at Dental Clinics (1996 – 2003)

Year	New attendances in rural health facilities, government hospitals/private clinics	New attendances to dental facilities	Percentage Utilisation
1996	429,779	106,412	24.8
1997	438,474	104,821	23.9
1998	497,231	105,610	21.2
1999	507,261	106,480	20.9
2000	517,138	95,325	18.4
2001	492,172	80,168	16.3
2002	491,009	71,491	14.6
2003	493,024	75,129	15.2

Source : Information and Documentation System Unit, Ministry Of Health Malaysia.

3. LITERATURE REVIEW

Oral health promotion programmes that have been developed are based on the principle of early intervention in the health education of a child[2]. Parents, teachers and peer groups are now recognised as the 'significant others' who are important role model for children[3]. In view of this and recognising the importance of oral health for mothers and children, several countries have introduced oral health programmes for target groups such as antenatal mothers.

3.1 Oral health programes for Antenatal Mothers

In Finland, an oral health promotion programme was introduced by the Public Health Act 1972[3]. Among the directives spelt out in this Act are activities in MCH clinics where all antenatal mothers are to be given Oral Health Education[3].

Most states in the United States (US) have their own state oral health programme that includes health promotion targeted towards antenatal mothers. In Texas, there are specific programmes for antenatal mothers comprising OHE and dental check ups[4]. In California, efforts are made to promote effective oral health practices in MCH programmes by incorporating oral health messages into guidelines or curricula of programmes like the Comprehensive Perinatal Programmes[5].

In the United Kingdom (UK), there is a comprehensive healthcare system under the National Health Service (NHS) where oral healthcare is provided by the General Dental Service (GDS) and the Community Dental Service (CDS). The CDS in particular provides oral healthcare for priority groups, which include children, expectant and nursing mothers and all other groups who experience difficulty in obtaining dental treatment elsewhere[6].

The Federation Dentaire Internationale (FDI) in its document on improving access to oral healthcare, stated that the public must be educated on the importance of oral health and its effect on general health. For this to be realised, there needs to be concerted action by the dental profession, public health authorities and individuals involved in the education of children and adults[7].

3.2 Oral health status of Antenatal Mothers

An increased incidence of dental caries has been reported among antenatal mothers[8]. Overall caries prevalence and severity are found to be high. A dental survey of an antenatal population carried out in Brisbane found that the average decayed, missing and filled (DMF) score for their subjects was 19.1, with an average number of 2.8 decayed teeth[9]. The authors also

reported that 30% of the subjects experienced some form of dental problem. Another study in Brisbane found high prevalence of dental caries among antenatal subjects at 99.7% with caries experience (DMF) of 15.8, and an average of 2.7 decayed teeth[10]. In 2000, a small study in Malaysia, found the prevalence of dental caries among antenatal mothers to be high (95.1%) with a mean of 8.1 DMFT[11]. A more recent local study in 2001 reported a similar high caries prevalence of 95.1% among 183 antenatal subjects[12]. The mean DMFT was 8.1 with an average number of 2.6 decayed teeth[12].

Gingivitis is also highly prevalent among antenatal mothers. Several studies reported gingivitis involving almost all subjects8,11,13. In Brisbane, 53% of antenatal subjects had gingivitis and 18% had periodontitis9. Another study found 47% of the antenatal mothers had gingival inflammation10. Maternal hormonal changes, presence of local irritants and an increased sensitivity to dental plaque are among the factors that have been implicated14.

3.3 Barriers to oral healthcare among Antenatal Mothers

Several reasons have been cited as barriers to seeking oral healthcare among antenatal mothers. The most common reasons for non-attendance after referrals were either one of the following:

- the respondents felt they 'did not have any dental problems',
- they were 'too busy'[11,15],
- the long waiting time,
- too many visits needed,
- fear and anxiety of the treatment or
- they 'did not perceive the need for urgent care'[16].

There is thus a need to direct and intensify oral health promotion efforts and to overcome perceived barriers to utilisation of oral healthcare among antenatal mothers.

4. OBJECTIVES

4.1 General Objective

The main objective of this programme is to create awareness among antenatal mothers on the importance of oral health as an integral and essential part of general health and thereby become agents of change within their families.

4.2 Specific Objectives

This programme aims to achieve the following specific objectives :

4.2.1 To empower mothers towards self-care, and towards attaining good oral health for themselves and their families.

4.2.2 To improve oral health status of antenatal mothers.

4.2.3 To increase utilisation of oral health services among antenatal mothers.

5. SCOPE OF PROGRAMME

This programme covers all antenatal mothers attending public healthcare facilities. This includes those referred from the private sector or other agencies. All will be given comprehensive oral healthcare and oral health education.

6. STRATEGIES

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

6.1 Strengthen and intensify oral health promotion to create greater oral health awareness.

6.2 Provide comprehensive oral healthcare to all antenatal mothers.

6.3 Establish collaboration with other healthcare personnel to ensure that oral healthcare is included in the overall health programme for antenatal mothers.

6.4 Ensure higher utilisation of services.

7. OPERATIONAL PROCEDURES

7.1 Strengthen oral health promotion to create greater oral health awareness

7.1.1 All available services are to be well-publicised through :

- **distribution of pamphlets on oral health**

  Ensure availability of pamphlets for antenatal mothers at MCH / Dental clinics.

- **radio / television talks**

Schedule sessions on oral health for radio or television. The State Deputy Director of Health (Dental) will liaise with relevant agencies on the scheduling of these sessions.

- **web-sites on oral health**

  Inform about the availability of oral health information on web-sites[17,18]. These website addresses may be publicised on pamphlets and on notice boards.

7.1.2 Involve oral health and other healthcare personnel in health promotion activities through Health Camps / Campaigns

- Organise campaigns with involvement of non-governmental organisations (NGOs), Board of Visitors or private agencies, etc.
- Oral health campaigns should include exhibitions of posters and display models.

7.1.3 Incorporate oral health messages into general health

i. Emphasise the following points during oral health education:

- Oral health care as a contributing factor to the improvement of overall quality of life. Good oral health is essential for facial esthetics and fresh breath. These contribute to self-confidence, self-esteem and better social interaction.
- The importance of regular oral health examination.
- The importance of balanced diet, taking lots of fruits and vegetables and reduced sugar consumption for better oral and general health.
- Tooth brushing and oral hygiene care as part of daily personal hygiene.

ii. Adopt the common risk factor approach in health education

- Need to highlight risk factors common to all diseases for example, high sugar intake and smoking.
- Health education sessions for patients with diseases like obesity, diabetes or coronary heart or any other diseases with implications to oral health should include oral health messages.

iii. Conduct training for other health personnel to inculcate awareness and provide oral health information guide

7.2 Provide comprehensive oral healthcare to all antenatal mothers

The following services will be rendered to all antenatal mothers referred to the dental clinics.

i. Antenatal mothers shall be given treatment at first visit where possible. Subsequent prompt appointments shall be given to render them orally fit.

ii. Scheduled OHE shall also be given to antenatal mothers. Through OHE, these mothers should be able to:

- recognise any oral health problems and take appropriate action;
- know and be able to practise effective tooth brushing and flossing;
- know the importance of a balanced diet and reduce frequency of sugar consumption for oral health.

7.3 Establish collaboration with other healthcare personnel to ensure that oral healthcare is included in the overall health programme for antenatal mothers

i. Involvement of other health personnel

- Convince all key health personnel on the importance of referral of antenatal mothers for oral health screening and treatment.
- Obtain co-operation from health personnel in ensuring that all new antenatal mothers are referred for oral health screening/dental appointment (antenatal cards to be stamped).

ii. Workshop / Seminars

Conduct oral health workshop / seminar for relevant health personnel involved in the antenatal programme (Appendix 1).

This is to ensure that:

- The aims and objectives of the antenatal programme are well understood.
- Standardised messages are disseminated to antenatal mothers.
  - Brush your teeth with fluoridated toothpaste
  - Reduce frequency of sugar consumption
  - Drink fluoridated water
  - Visit your dentist at least once a year

- Other health personnel may understand their roles in ensuring the success of the oral health programme for antenatal mothers.

7.4 Ensure higher utilisation of services

Appropriate oral health services to be made available and easily accessible.

- To provide oral health screening and inform any existing oral health problems.
- To impress upon them the importance of good oral health. Pamphlets on oral health care shall be given and the contents explained.
- To schedule appointments at earliest date convenient. Reduce waiting time and to provide immediate treatment whenever possible and prioritise according to needs.
- Schedule OHE sessions by dental officers/dental nurses for all antenatal mothers. Where possible, husbands are also invited. Chairside OHE can be provided when necessary.

8. MONITORING AND EVALUATION

Monitoring and evaluation of the oral healthcare programme for antenatal mothers should be done on a regular basis. Available data from existing formats in the Health Management Information System as listed can be utilized:

i. LP 8 for oral health screening and treatment.
ii. PG 301/302 and PKP 201 for recording of daily work returns.
iii. PG 207 and PKP 201 for recording of monthly work returns.

Evaluation of the antenatal programme can be done using the following indicators:

a. Percentage of new attendances

$$\frac{\text{Number of new attendances}}{\text{Total number registered with MCH clinics}} \times 100$$

b. Percentage completed cases

$$\frac{\text{Number completed treatment}}{\text{Total number registered with Dental clinics}} \times 100$$

c. Percentage given OHE

$$\frac{\text{Number given OHE}}{\text{Total number registered with MCH clinics}} \times 100$$

Modified Budgeting System (MBS) are routinely carried out every five years and several indicators are used for the purpose of evaluation. This programme can also be evaluated through this manner and Health System Research may be carried out depending on need.

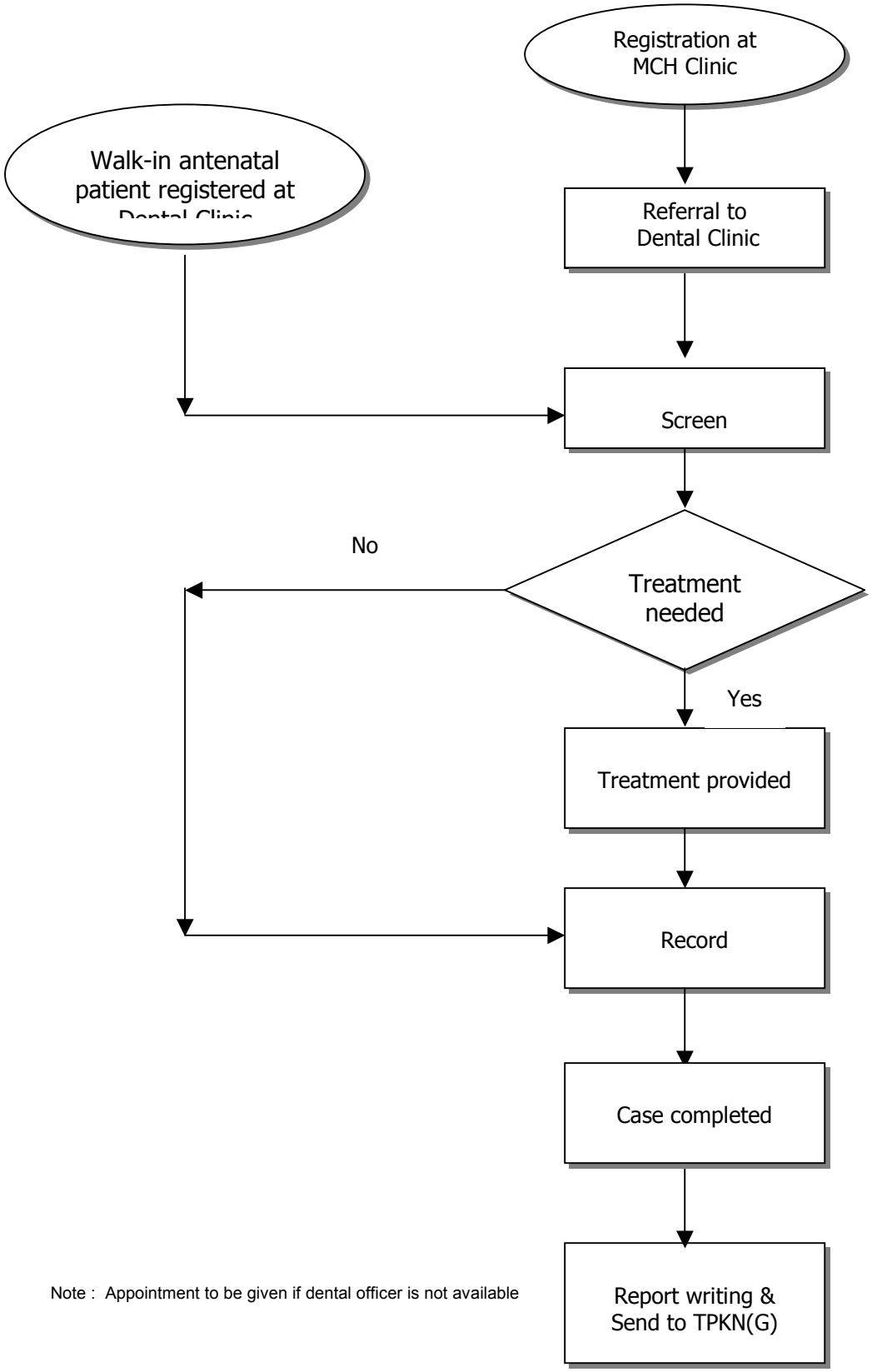
9. CONCLUSION

This guideline will facilitate standardised and systematic implementation of oral health programme for antenatal mothers and can be referred to for training of oral health personnel and other healthcare personnel. It is therefore hoped that the use of this guideline will not only increase the awareness on the importance of oral health among antenatal mothers but will also improve the utilisation of oral healthcare services and the oral health of antenatal mothers and their families.

APPENDIX I

WORK FLOW

OPERATIONAL PROCEDURES



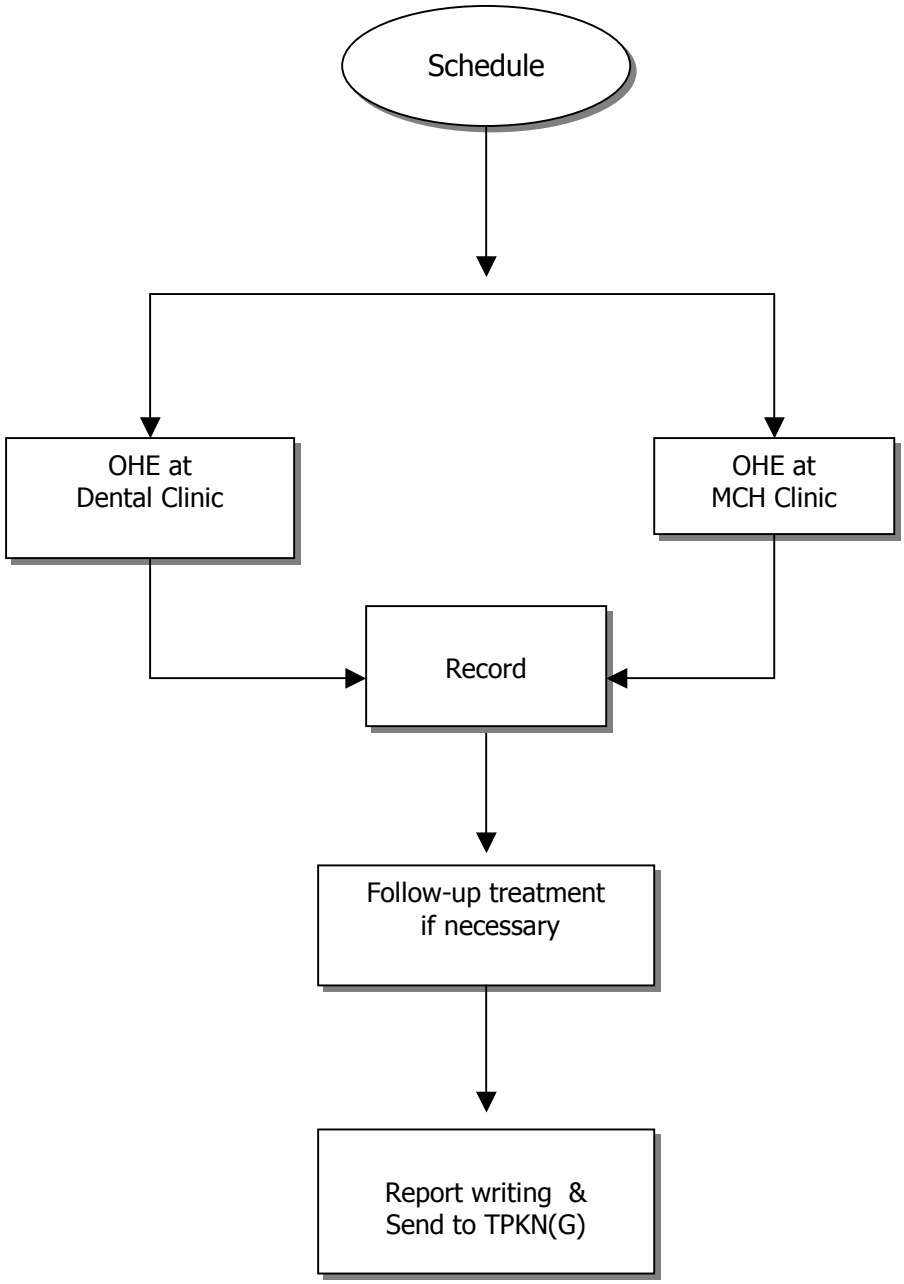
Note : Appointment to be given if dental officer is not available

APPENDIX II

WORK FLOW

OPERATIONAL PROCEDURES

FOR ORAL HEALTH EDUCATION SESSION



APPENDIX III

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