

## A SURVEY OF DENTAL KNOWLEDGE IN AL-JUBAIL ANTENATAL CLINIC POPULATION

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تصبح المرأة الحامل أكثر تقبلاً لأي معلومات مفيدة لطفلها الذي لم يولد بعد. ويصبح الطبيب قادراً على إقناعها بسهولة كي تلتزم بالقواعد الصحية. والنساء الحوامل يتلقين نصائح تخص التغذية وعلاقتها بالوزن. لكن لسوء الحظ القليل من المعلومات المفيدة التي تعطي لها.

الكثير من النساء تؤمن بأن فقد بعض أسنانهن يعود للحمل. وأكثر من ذلك فيعضهن يؤمن بأن أجهزةهن الجسمية تتبدل، ويصبح اللعاب أكثر حموضة، مما يزيد من حدوث النخر. على أي حال، عرف منذ سنوات بأن الإصابة بالنخر ليست لها علاقة بالحمل.

وهناك أسباب إضافية لتدخل طبيب الأسنان بتوعية المرأة الحامل إذ أن استهلاك الكثير من مادة الفلور يمكن أن يسبب تسمماً فلورياً وتناول مادة التتراسيكلين يمكن أن يسبب تصبغ الأسنان اللبنية.

في هذه الدراسة أجري مسح لإظهار مدى معرفة المرأة الحامل بالأمور السنية، والعادات وعلاقتها بالصحة الفموية السنية. والهدف من هذه الدراسة كان لمعرفة نقاط الضعف الموجودة لدى المرأة الحامل بالنسبة لهذه الأمور.

وزعت أوراق تحتوي على ثلاثين سؤالاً لإجراء هذا المسح السنّي على خمس عشرة مريضة من الحوامل، وقد قسمت الأسئلة إلى أربعة أجزاء، تشمل معلومات عن الصحة السنية، مثل السيرة السنية الشخصية والعادات، والحالة السنية الحالية، ومقدار رعاية الحامل بأسنانها. وقد تم اختيار عينة عشوائية (150) مريضة سعودية حاملاً في ثلاث مشافي مختلفة في منطقة الجبيل، في هذه المشافي تم إعطاء هؤلاء المرضى بطاقات زيارة تحتوي على أرقام متسلسلة، وتتراوح أعمار هؤلاء المرضى ما بين 15 - 42 سنة جميع المرضى أجابوا على الأسئلة في حين عشرة مرضى لم يردوا على الأسئلة.

وقد تبين من النتائج أن معظم المرضى قد أظهروا درجة جيدة في المعرفة السنية.

The results of a survey on the knowledge and practices related to oral health care of 140 patients seen at the three hospitals in Jubail area are presented. Poor standards were evident in relation to the knowledge of basic aspects of dental health and in the practice of personal oral hygiene. The most significant deficiency was failure to seek regular dental care. Of the patients, 67% visited their dentist only as a matter of necessity "due to toothache". Another deficiency was that 33% of the patients were never advised by their doctor to see a dentist.

### Introduction

When a woman becomes pregnant, she becomes receptive to any information which will benefit her unborn child. Health information is of much interest to her and her family, and health professionals can more easily motivate her to follow guidelines towards a sound physical health.<sup>1</sup>

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Pregnant women are exposed to a great deal of educational materials on the physical signs of pregnancy. They receive information on diet and weight. In some countries many women and their husbands, learn the skills necessary for natural childbirth. They are informed on postnatal care of the child. Unfortunately, little instruction and preparation is dentally oriented. Just as the medical profession recognizes and responds to this prime time for education, the dental profession can also take this opportunity to influence the development of positive attitudes toward dental health. In 1976, Nowak reported that parental exposure in prenatal counseling provides an excellent opportunity, for both parents, to establish their own oral health practice.<sup>2</sup>

Many women believe that loss of some of their teeth is due to pregnancy. Furthermore, they believe that their systems change and saliva becomes more acidic, thus, causing tooth decay. However, it has been known for years that caries susceptibility is virtually unaffected by pregnancy.<sup>3</sup>

There are additional reasons why dental practitioners should be involved in mothers' education and not to leave preventable dental disease to chance. Maternal overt consumption of fluoride can cause dental fluorosis, and the ingestion of tetracycline antibiotics can cause staining of the developing primary dentition.<sup>4</sup>

In this study, a survey of pregnant women was undertaken with particular reference to their knowledge, attitudes and habits in relation to oral and dental health care. The aims of this study were to determine what deficiencies existed in these areas, to utilize this information in formulating recommendations for improvements and to provide a basis for more detailed studies.

### Materials and Methods

A questionnaire of 30 questions was prepared for this survey and a pilot study involving a sample of 15 antenatal clinic patients was carried out. The purpose of the pilot study was to enable vague or ambiguous questions to be rephrased.

The questionnaire was divided into four sections, which included dental health knowledge, personal dental history and habits, current dental state, and antenatal care (Appendix 1).

One-hundred-fifty Saudi pregnant women patients were randomly selected from the three different hospitals in Jubail area, where they are given visiting cards with serial numbers. In this study, patients with odd-numbers were handed questionnaires. They were at different stages of pregnancy and were selected while visiting the antenatal clinic. Ages ranged from 15–42 years.

The questionnaires were distributed among the patients. A female social worker assisted patients in answering the questionnaire. All patients, who responded, answered all the questions. Ten patients did not return the questionnaires.

### Results

#### *Dental knowledge*

Most patients had multiple answers on the

source of dental knowledge. An analysis of the questionnaire results showed that 136 (97.14%) women were aware that cleaning the teeth lessens tooth decay. Two patients (1.43%) did not know, while 1 (0.71%) did not consider that dental hygiene lessens tooth decay.

One-hundred-twenty-four (88.6%) patients were aware that brushing the teeth helps to maintain a healthy gum. One-hundred and seven (76.4%) patients knew that excessive sugar in the diet contributes to tooth decay. One-hundred (71 %) patients were aware that fluoride has a significant value in preventing tooth decay. On the other hand, sixty-seven (47.9%) of the women thought that pregnancy causes teeth to go bad and thirty-seven of them (26.4%) believed that bad teeth are inherited.

#### *Personal Dental Health Practices*

Patients who cleaned their teeth once a day or less frequently were 23% while the remaining patients cleaned their teeth more than once a day. It was also reported that 67% of the samples visited the dentist only when they had dental trouble, and 8% have never been to a dentist.

The chief factors limiting regular dental visits in order of frequency were inability to afford the time, lack of dentists in the area, fear, and inadequate finance. The limiting factor for one patient was "fear from contaminated instruments in dental clinic after she has heard about AIDS".

#### *Current Dental Status*

During the survey, 39% and 22% answered that their teeth and gums, respectively are causing problems. Of the patients, 48% thought they needed dental treatment, however only 19% were undergoing treatment.

#### *Antenatal Clinic Care*

Eighty-six percent of the patients have been to the antenatal clinic more than once and 6.4% of the patients have made only one visit. The remaining ten patients did not specify the number of visits. It was noticed that 83% of the patients had never been advised by their doctor to see a dentist and 71% replied that they would be willing to attend dental examination as part of the antenatal service, if a dentist was provided.

### Discussion

Very few studies have investigated the extent of dental awareness among pregnant mothers. Consequently, it is difficult to assess how knowledgeable an expectant mother is about oral health care and how she puts this knowledge into practice.

The results obtained from the questionnaires showed that most of the women exhibited a high degree of dental knowledge. This is not surprising since following the trails of primary health care and "Health for all in the years 2000" promulgated by the World Health Organization (WHO), enabled dentistry to make giant progress in establishing oral health care awareness. New frontiers in dental care are being introduced as well. However, in spite of this, the responses on "Personal Dental Health" revealed poor preventive dental care especially in pregnancy and childhood. For instance, nearly half of the respondents (42%) had received their first dental treatment sometime between the ages of 10 and 20 years; and 67% visited the dentist only when they had problems.

The current dental status is not encouraging because nearly half of the patients (48%) felt that they need dental treatment at the moment. In 1987, Al-Shammery<sup>5</sup> reported a high treatment demand for restorative and periodontal therapies among Saudi population. From the 1,856 files of Saudi patients evaluated, restorative needs accounted for 30.81% and periodontal treatment need was recorded for 27.24%. In the Kingdom of Saudi Arabia, dental treatment is free of charge in public facilities. In addition, a large number of polyclinics and hospitals are offering dental treatments. However, it appears that there is a shortage of dental preventive programs. These programs are needed to educate patients about the importance of visiting the dentist on a regular basis.

During pregnancy, gynecologists ought to explain to their patients the importance of visiting

their dentist. These specialists should not concentrate on the pregnancy alone. From the results, only 9% of the patients had been advised and 91% had never been advised to visit the dentist. The antenatal clinics should consider requiring dental examination for pregnant women as a part of the follow-up visits.

### Conclusion

It is important for the patient to be examined medically early in her pregnancy. A special dental program should be designed to meet the needs of the would-be-mothers. A program which can establish a personal sense of responsibility on the woman's part to attain and maintain optimum dental health for herself and her child, needs to be presented.

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## Questionnaire

### SECTION (1): DENTAL KNOWLEDGE

1. Do you think cleaning teeth lessens tooth decay?
2. Do you think that brushing teeth helps the gums?
3. Does too much sugar in food cause tooth decay?
4. Do you think bad teeth are inherited?
5. Do you think that pregnancy itself causes teeth to go bad?
6. Have you heard of fluoride?
7. Do you think fluoride has any value in preventing tooth decay?
8. Who taught you most of what you know about dental care?

\*Answers for these questions were either yes, no, or don't know except for question no. 8 where appropriate lists of answers were given.

### SECTION (2): PERSONAL DENTAL HEALTH

9. At what age did you first receive dental treatment?
10. How regularly do you attend a dentist?
11. How recently have you attended a dentist?
12. How often do you clean your teeth?
13. Why did you last visit your dentist?
14. Does lack of finance limit your visit to the dentist?
15. Does your fear limit your visit to the dentist?
16. Does the fact you can't afford time to attend limit your visits to the dentist?
17. Does the fact that you don't care about your teeth limit your visits to the dentist?
18. Does the fact that there is no dentist in the area where you live limit your visits to the dentist?
19. Does anything else limit your visits to the dentist?
20. The dentist who normally treats you, is he/she?

\*Question nos. 14-19 were answered either by yes, no, don't know or no answer at all, question 20 was given appropriate list of answers.

### SECTION (3): CURRENT DENTAL STATE

21. At the present time are your teeth causing you any bother?
22. At the present time are your gums causing you any bother?
23. Do you think that you need dental treatment at the moment?
24. At the present time are you undergoing any dental treatment?
25. During this or any previous pregnancy has cleaning your teeth made you feel sick?
26. Do you think you are cleaning your teeth less often since you became pregnant?
27. If you are wearing dentures, are they causing any bother?

\*Answers for these questions were either yes, no, or don't know.

### SECTION (4): ANTENATAL CLINIC CARE

28. How many visits have you had to antenatal clinic so far?
29. During this pregnancy have you been advised by a doctor to see a dentist for any reason at all?
30. Would you attend for dental examination as part of the antenatal service if a dentist was provided?

\*Answers for these questions were either yes, no, or don't know except for question no. 28.