

## **Knowledge, attitude and practices among Gynecologists regarding Oral Health of expectant mothers of Vadodara City, Gujarat**

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### **Abstract:**

**Background and Objectives:** To assess the knowledge, attitude and practices among Gynecologists' regarding oral health of expectant mothers of Vadodara city, by using self designed, structured, pre-tested close ended questionnaire.

**Methodology:** Total of 130 gynaecologists are included in the study. Ethical approval was obtained by the Ethics committee, Sumandeep Vidyapeeth, Vadodara. Prior to study, questionnaire was pre-tested and validated. Those individuals who participated in the pilot study were not considered for the main study to prevent possible bias. The informed consent was obtained and information sheet was given. The questionnaire was administered on first day of visit and on the next day it was collected back. For statistical analysis SPSS package version 17 and Pearson's Chi Square test was used.

**Results:** The study revealed that majority of gynecologists had good knowledge, attitude and practices regarding oral health of expectant mothers and there is no significant difference in relation with age, sex and years in practice.

**Conclusion:** Majority of gynecologists had good knowledge, attitude and practices but still there is a need for more active participation and involvement of medical specialists like gynecologists and pediatricians, in continuing education programs and forums on dentistry.

**Keywords:** Gynecologists, Expectant mother, Oral health

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**Introduction:**

Oral health is an integral component of general health. <sup>(1)</sup> For many years, the approach to oral disease has been to treat destructive effects and then initiate a preventive program. Contemporary guidelines recommend more emphasis on early professional intervention and primary preventive strategies for oral health, which are essential public health priority. <sup>(2)</sup>

Mothers play an important role in child's development; oral health counseling is especially important for the mother. Gynaecologists, due to frequent contacts with family are in an ideal position to provide guidelines for improving oral health care to the mothers <sup>(3,4)</sup> Pregnancy is a time when a woman strives to be particularly aware of the need for health. 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.

Pregnancy is a good stage to instill appropriate oral hygiene practices in expectant mothers. 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>(5)</sup>

There are additional reasons why health professionals should be involved in mothers' education and not leave preventable dental disease to chance. Maternal overt consumption of fluoride can cause dental fluorosis; periodontal disease in mothers can lead to pre term, low birth weight babies, decay causing bacteria can be transmitted from the mother and the ingestion of tetracycline antibiotics can cause staining of the developing primary dentition. <sup>(6)</sup>

Thus by increasing the involvement of gynaecologists during pregnancy care visits; they may be able to play an important role in improving the oral health for their patients.

However, it is unclear to what extent these medical professionals are really aware of preventive strategies and to what extent they impart preventive dental counseling as a part of pregnancy visits.

Therefore the present study was designed to assess the knowledge, attitude & practices regarding oral health of expectant mothers among the gynaecologists practicing in

Vadodara city, Gujarat because it is the attitude and the knowledge of the gynaecologists that may enhance or impede the implementation and eventual success of a preventive programme.

**Materials & Methods:**

Vadodara is the eighteenth largest and one of the cosmopolitan cities of India which is located on the banks of Vishwamitri River having population of 41.58 lakh <sup>(7)</sup> Medical needs of the populations of Vadodara city is met by Government run medical college and hospital, Hospitals run by Public and Private Partnerships, Blood Banks, Ambulance services, Private run medical college and hospitals, Social organizations and NGOs, PHCs, CHCs, and sub centre in Vadodara district, Anganwadi and ASHA workers, Vaccination centers.

The study subjects were selected from Indian Medical Association (IMA), Vadodara branch. <sup>(6)</sup> A total of 172 gynaecologists are registered from Vadodara district among them 130 are from Vadodara city. Gynaecologists who were not willing to participate in the study & who did not respond/gave back the questionnaire during the stipulated time period in spite of repeated reminders were excluded from the study.

The ethical approval was obtained from the Ethics committee, Sumandeep Vidyapeeth, Piparia, Vadodara.

A pilot study was conducted on 10% of the total sample size i.e. 13 gynecologists to check the feasibility of the study and to validate the questionnaire.

Prior to study, questionnaire was pre-tested and validated. The questionnaire was validated for construct & content validity, reliability and ease of use. Content and construct validity showed no significant changes. Questionnaire showed high degree (0.89) of agreement during test-retest of questionnaire.

Those individuals who participated in the pilot study were not considered for the main study to prevent possible bias.

Two days in a week were allotted for conducting the study. For each gynecologist, the questionnaire was administered on first day of visit and on the next day it was collected back. The participants who had not filled up the questionnaire on second day of visit were requested to give it in another two days.

Information sheet & informed consent were obtained from the participants.

The data was analyzed by applying descriptive & inferential statistical analysis. Analysis was carried out using SPSS package version 17. Pearson's Chi Square test was used to check the difference in knowledge, attitude and practice among gynaecologists. Level of significance was kept at 5% ( $P= 0.05$ ).

**RESULTS:**

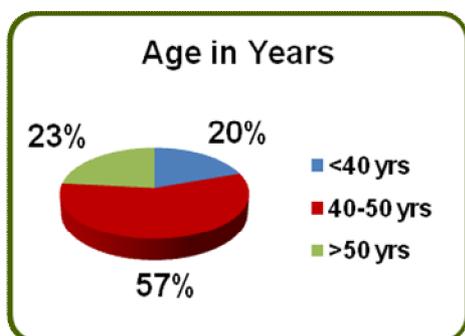


Figure 1 shows distribution of gynecologists by age.



Figure 2 shows distribution of gynecologists by years of practice.

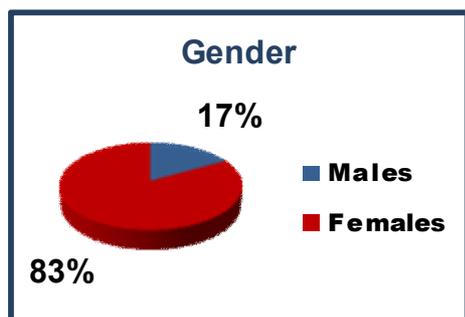


Figure 3 shows distribution of gynecologists by gender.

Figure 1 illustrates that out of 108 gynecologists, 18 (16.8%) gynecologists were male & 89 (83.2%) gynecologists were female. Figure 2 shows that out of total 107 gynecologists, 21(19.6%) were below 40 years of age, 61(57%) were between 40-50years and 25(23.4%) were more than 50 years. Figure 3 illustrates that 8(7.5%) gynecologists were having experience less than 5 years of age, 27(25.2%) were having experience between 5 to 10 years and 72(67.3%) were having more than 10 years of experience.

Further the result of the question asked are

Question	Yes (%)
Do you advice your patients to use fluoridated tooth paste?	45(42.1%)
Do you think dental reference is important for your patients?	26(24.3%)
Do you refer your patients to Dentist?	51 (47.7%)
Do you feel examination of Oral cavity should be integral part of	45 (42.2%)
Do you check oral cavity of expectant mothers?	67 (62.6%)
Can certain drug create oral side effects in fetus when taken	90 (84.2%)
Do any changes in dental health occur during pregnancy?	42 (39.2%)
Do you advice major/minor surgery during pregnancy?	20 (18.7%)
Do you think updating your self with latest technology related to	85 (79.5%)
Do you think attending conference on oral health is	89 (83.2%)
Do you advice diet counseling to your patient?	77 (72.0%)
Do you advice patient to quit tobacco/alcohol?	93 (86.9%)
Can Gum disease in the mother affect the birth weight of child?	94 (87.9%)
Do you think that patient's attitude towards dental care is related to maternal health?	73 (68.2%)

shown in table 1

The result also shows that there is no significant difference between knowledge, attitude and practice with gynecologist's years of experience, age, gender.

#### **Discussion:**

Dental awareness of qualified medical practitioner may be inadequate with regard to knowledge about dental diseases, oral hygiene practice and specialty treatment rendered by the dental practitioner. There are very few studies reported in literature on the oral health awareness of medical practitioners in particular gynecologists. It is unclear to what degree these specialists are having knowledge about oral health and the extent to which they may already be participating in the prevention and assessment. Also little is known about the incidence of dental problems in their practice.

Hence this study was undertaken to assess knowledge, attitude and practices among gynecologists regarding oral health of expectant mothers of Vadodara city, Gujarat. The advantage of a questionnaire study is that, it allows information to be collected and analyzed easily and it also allows the concerned specialist to express freely their perception on oral health care.

In the present study it was observed that most of the gynecologists had good knowledge, attitude and practice regarding oral health of expectant mother. Majority of the gynecologists advised diet counseling which correlates to the finding of the study conducted by Subramaniam (2008).<sup>(8)</sup>

In our study 87.9% gynecologists were aware of the side effect of gum/periodontal disease which does not coincide with the results of the study conducted by Subramaniam (2008).<sup>(8)</sup> Whereas, awareness regarding the side effect of drugs used during pregnancy was almost similar.

42.1% of the gynecologists in our study recommended fluoridated tooth paste and 62.6% of the gynecologists advised twice a day brushing to their patient which was similar to the findings of the study of Subramaniam (2008).<sup>(8)</sup>

Studies conducted by Shenoy (2009)<sup>(9)</sup> revealed that about 85% of the gynecologists referred their patients to the dentists which was much higher referral than our study. 55% of the gynecologists in the study conducted by

Shenoy (2009)<sup>(9)</sup> agreed that periodontal disease in mothers may lead to pre term low birth weight babies whereas, in the present study 87.9% of the gynecologists were aware of the fact.

Gynecologists under the age group of 40 – 50 years had better knowledge than those in the other group. This may be attributed to the combination of latest knowledge and good experience. Knowledge was good among the gynecologists having experience of 5 - 10 years. No difference of knowledge was obvious among the male and female. Gynecologists more than 50 years of age were having good attitude, this may be because they face more & different type of cases in their routine practice.

Very limited studies have been conducted which assess the knowledge, attitude and practices among gynecologists regarding oral health of expectant mothers, so direct comparisons with other studies are difficult to make.

It appears from this study that gynecologists understood how oral health of the mother is important during pregnancy. This study indicated that gynecologists firmly believe that they have an important role in the promotion of oral health and they have shown interest in attending program on oral health.

Increasing gynecologist's involvement in oral health care, during pregnancy prenatal counseling can play an important role in improving the dental health of expectant mothers. This is particularly important in developing countries with semi urban and rural populations, where access to professional dental care is difficult. Gynecologists must assure that all their patients receive timely preventive dental care. However they can never replace the care provided by the dentists.

There is a need for more active participation and involvement of the allied medical specialists: namely pediatricians and gynecologists, in continuing education course and forums on dentistry.

#### **Conclusion:**

The study revealed that majority of gynecologists had good knowledge, attitude and practices regarding oral health of expectant mothers.

A comprehensive oral health program with the hand in hand of gynecologists is possible

and has the potential to establish attitudes about the importance of maintaining optimum oral health of expectant mothers. A multidisciplinary team that include the family physician, gynecologists and dental practitioner should assume an active role in providing health education to pregnant women which can significantly decrease the possibility of oral diseases.

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