

# Knowledge, Attitude and Practices among Gynecologists regarding Oral Health of Pregnant Woman's of Patna, Bihar

Abhishek Anand<sup>1</sup>, Ranvijay<sup>2</sup>, Aditi Singh Tanwar<sup>3</sup>, Swati Sharma<sup>4</sup>

## ABSTRACT

**Introduction:** The study was done with the aim to assess the Knowledge, attitude and practices among Gynecologists regarding Oral Health of Pregnant Woman's of Patna, Bihar by using self designed, pre-tested close ended questionnaire.

**Material and methods:** A total of 150 gynecologists were selected for the study and a comprehensive questionnaire was prepared based on studies done by Harsh G. Shah et al (2013). The permission for the study was taken from the concerned authorities and ethical clearance was taken from institutional ethical clearance committee of Buddha Institute of Dental Sciences and Hospital, Patna.

**Results:** The result showed that the majority of gynecologists had good knowledge, attitude and practices regarding oral health of pregnant woman's and there is no significant difference in relation with age, sex and years in practice.

**Conclusion:** The study showed that the 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:** Attitude, Pregnant Woman's, Knowledge

## INTRODUCTION

Oral health is essential to general health and well-being at every stage of life.<sup>8</sup> Maintenance of good oral hygiene of the children enables not only nutrition of the physical body, but also enhances social interaction and promotes self-esteem and feelings of well-being. The mouth of the children serves as a "window" to the rest of the body, provides signals of general health disorders. For example, mouth lesions may be the first signs of HIV infection, aphthous ulcers are occasionally a manifestation of Coeliac disease or Crohn's disease.

Oral conditions have an impact on overall health and disease. Bacteria present in the mouth can cause infection in other parts of the body when the immune system gets compromised by disease or medical treatments (e.g., infective endocarditis). Systemic conditions and their treatment are also known to impact on oral health (e.g., reduced salivary flow, altered balance of oral microorganisms). Recommendations for early professional intervention and primary preventive strategies for oral health, which are essential public health priority.

Mothers play an important role in overall development of the child. The quality of preventive health care and the future oral health is determined by the oral health counseling of the mother. Gynecologists, play an important role in improving oral health care to the mothers and provide screening services for early detection of dental diseases, advice for the need to seek dental care and refer those who are in need.<sup>1,2</sup>

Pregnancy has been considered an impediment to dental treatment. However, preventive approach, emergency care, and

routine dental procedures are all suitable during various phases of a pregnancy, with some treatment modifications. In 1976, Nowak stated that parental exposure in prenatal counseling provides an excellent opportunity for both parents to establish their own oral health practice.<sup>3</sup> So, by increasing the involvement of gynecologists during pregnancy will lead to improving the oral health for their patients.

The present study was designed to fill this lacuna since there was no information on the knowledge, attitude and practices regarding oral health of pregnant woman's among the gynecologists practicing in Patna, Bihar.

## MATERIAL AND METHODS

The lists of gynecologists were obtained from Indian Medical Association (IMA), Patna. A total of 150 gynecologists were selected for the study and a comprehensive questionnaire was prepared based on studies done by Harsh G. Shah et al (2013).<sup>5</sup> The permission for the study was taken from the concerned authorities and ethical clearance was taken from institutional ethical clearance committee of Buddha Institute of Dental Sciences and Hospital, Patna.

A pilot study was conducted on 10% of the total sample size i.e 15 gynecologists was taken to check the feasibility of the study and to validate the questionnaire. Those individuals who participated in the pilot study were not considered for the main study to prevent possible bias.

Questionnaires were personally handed over to the gynecologists and it was collected after two days.

## STATISTICAL ANALYSIS

The data analysis was done by applying descriptive and inferential statistical analysis.

## RESULTS

A total of 135 Gynecologists completed the questionnaires provided to them and participated in the study (Table 1). The respondents consisted of 7% (10) males and 93% (125) were females illustrated in Figure 1. Figure 2 shows that out of total 135 gynecologists, 25 (19%) were below 40 years of age, 80

<sup>1</sup>Consultant Pedodontist, <sup>2</sup>Consultant Oral and Maxillofacial Surgeon, <sup>3</sup>Post Graduate Trainee, Department of Pedodontics and Preventive Dentistry, Buddha Institute of Dental Sciences and Hospital, Patna, Bihar, <sup>4</sup>Lecturer, Department of Pedodontics and Preventive Dentistry, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand, India

**Corresponding author:** Dr. Abhishek Anand, Maharaja kameshwar complex, Flat No. 502B, Frazer Road, Patna- 800001 (Bihar), India

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(59%) were between 40-50 years and 30 (22%) were more than 50 years. Figure 3 represents that 30 (22%) gynecologists were having experience less than 5 years of age, 40 (30%) were

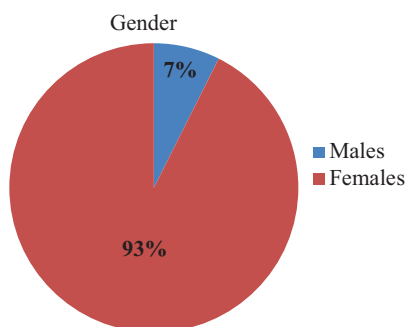


Figure-1: Shows distribution of Gynecologists by Gender

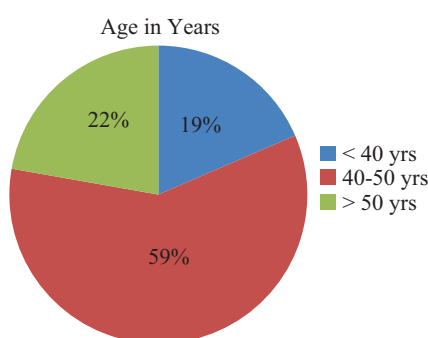


Figure-2: Shows distribution of Gynecologists by age

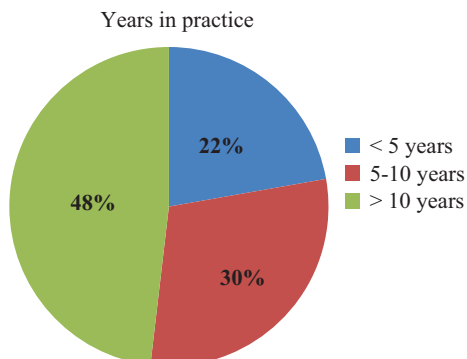


Figure-3: Shows distribution of Gynecologists by years of practice

having experience between 5 to 10 years and 65 (48%) were having more than 10 years of experience.

The result of the question asked from the respondents is shown in Table 1. The result showed that the majority of gynecologists had good knowledge, attitude and practices regarding oral health of pregnant woman's and there is no significant difference in relation with age, sex and years in practice.

**DISCUSSION**

The Guidelines prepared by AAPD emphasize on infant oral health is the framework upon which preventive education and dental care must be made to enhance the opportunity for a lifetime free from preventable oral disease.<sup>4</sup> The allied health professionals and community organizations must be involved as partners to achieve this goal. There are limited literatures available on the oral health awareness of gynecologists. It is not clear from the available data 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.<sup>5</sup> This study was undertaken to assess knowledge, attitude and practices among gynecologists regarding oral health of pregnant woman's of Patna, Bihar. The questionnaire based study are helpful in getting 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 most gynecologists 92.5% were aware of the side effects of gum/periodontal disease which are similar to the study done by Harsh G Shah et al (2013)<sup>5</sup> whereas, awareness regarding the adverse effect of drugs used during pregnancy was almost similar.

In the present study it was observed that most of the gynecologists had good knowledge, attitude and practice regarding oral health of pregnant woman's. majority of the gynecologists advices diet counseling which correlates to the finding of the study done by Subramaniam (2008).<sup>6</sup>

Gynecologists (55%) participated in the study conducted by Shenoy (2009)<sup>7</sup> agreed that periodontal disease in mothers may lead to pre term low birth weight babies whereas, in the present study 92.5% of the gynecologists were aware of the fact.

Gynecologists under the age group of 40 –50 years had better knowledge than those compared with other group. This may be due to the combination of latest knowledge and good experience felt by them in there practice. Knowledge was good

Question	Answer (%)
Do you recommend your patients to use fluoridated toothpaste?	65 (48.1%)
Do you think dental reference is important for your patients?	70 (51.8%)
Do you refer your patients to Dentist?	68 (50.3%)
Do you think examination of oral cavity should be the integral part of general health?	72 (53.3%)
Do you check oral cavity of pregnant woman's?	82 (60.7%)
Can certain drug create oral side effects in fetus when taken during pregnancy?	110 (81.4%)
Do any changes occur in dental health during pregnancy?	55 (40.7%)
Do you advice major/minor surgery during pregnancy?	25 (18.5%)
Do you think updating yourself with latest technology related to oral health?	94 (69.6%)
Do you think attending conference on oral health is essential?	100 (74%)
Do you advice diet counseling to your patients?	112 (82.9%)
Do you advice patient to quit tobacco/alcohol?	115 (85.1%)
Can gum disease of the mother affect the birth weight of child?	125 (92.5%)
Do you think that patient's attitude towards dental care is related to maternal health?	98 (72.5%)

**Table-1:** Knowledge, attitude and practices among Gynecologists regarding oral health of Pregnant Woman's of Patna, Bihar.

among the gynecologists having experience of 5 – 10 years and 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 and different type of cases in their routine and regular practice.

Very few literatures are available which assess the knowledge, attitude and practices among gynecologists regarding oral health of pregnant woman's, so direct comparisons with other studies are very difficult to make.

48.1% of the gynecologists in our study recommended fluoridated tooth paste and 51.8% gynecologists think dental referral is important to their patients which was similar to the findings of the study of Subramaniam (2008).<sup>6</sup>

By increasing the involvement of gynecologists in oral health care, during prenatal counseling and child care visits, will lead in improving the dental health of their patients. This is particularly important in developing countries with semi-urban and rural populations, where access to professional dental care is difficult to obtain. Gynecologists must enquire and take care of their patients regarding timely preventive and restorative dental treatment. However, they can never replace the care provided by the dental surgeons.

There are one more 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>9</sup>

The introduction of mandatory dental examinations for women in early stage of pregnancy should motivate dentists to introduce a new approach of prevention services which result in closer cooperation with gynecologists in order to reduce the prevalence of delivery of pre-term low birth weight babies.<sup>10</sup>

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

## CONCLUSION

The study revealed that majority of gynecologists were having good knowledge, attitude and practices but still there is a need for active participation and more involvement of medical specialists like gynecologists and pediatricians, in continuing education programs and forums on dentistry.

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