

Knowledge, attitude and practices among gynecologists regarding oral health of expectant mothers in Agra city, Uttar Pradesh

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Abstract

Aim : The aim of this study was to evaluate the knowledge and attitude of Gynecologist regarding the oral health of expectant mothers in Agra city.

Material and methodology: The study involved a survey of 50 Gynecologist in Agra city. The questionnaire was prepared regarding the same. The data collected was subjected to statistical analysis.

Result: In this study, 98.3% of the gynecologist were aware that the gum / periodontal disease in the mother and can affect the preterm birth, the low weight of infants and 100 % agrees that the second trimester is the safest time during pregnancy for any minor procedures to be done in the oral cavity.

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: Gynecologist, Pre-eclampsia, Obstetric complications, Random sampling

Introduction

Pregnancy is a state of physiological condition that brings about various changes in the oral cavity along with other changes taking place throughout the female body. ¹ Most women do not access oral health care during pregnancy and evidence concluded that poor oral health can have an

adverse impact on the health of a pregnant woman and her child.²

Oral problems primarily include gingivitis and periodontal infections are by far the most common oral disease observed amongst pregnant women. There is a reported obstetric complications, including pre-eclampsia, premature birth, and low birth weight babies. Decay is caused bacteria that can be transmitted from the mother to the child. The ingestion of tetracycline antibiotics can cause staining of the developing primary dentition in children. It is a good stage to instill appropriate oral hygiene practices in expectant mothers. The parental exposure in prenatal counseling provides an excellent opportunity, for both parents, to establish their own oral health practice and their child.

Gynecologists, due to frequent contacts with family are in an ideal position to provide guidelines for improving oral health care to the mothers and plays an important role in managing the problems which can occur during pregnancy and their child in future. It is unclear to what extent these medical professionals are really aware of preventive strategies and dental counseling as a part of pregnancy visits. Therefore the present study was designed to access the knowledge, attitude, and practices regarding the oral health of expectant mothers among the gynecologist practicing in Agra city.

Materials and Methodology

The present study involved a survey of 50 Gynecologist in Agra city. Random sampling was done from Agra city. For each gynecologist, the questionnaire was administered on the first day of the visit and on the next day it was collected back.

The questionnaire used for the survey consisted of five tabular forms.

Table 1: Demographic Data Of The Study Participants

According to age	<40	26.7%
	41-50	23.3%
	>=50	50%
According to gender	Male	26.6%
	Female	73.3%
According to years of experience	<5 yrs	20%
	5-10 yrs	16.6%
	>10 yrs	63.3%

Result for table 1: Out of 50 gynecologist 26.7% were under 40 yrs of age, 23.3% were between 40-50 yrs of age and 50% were more than 50 yrs of age. 26.6 % were male and 73.3% were female. 20% the gynecologist was having experience of fewer than 5 yrs of age, 16.6% were having about 5-10 yrs of age and 63.3 % were having of more than 10 yrs of experience as shown in the table.

Table 2: Knowledge of gynecologist about dental treatment during pregnancy.

S.N.	Questions	Yes	No	Percentage
1	Do you feel the examination of the Oral cavity should be an integral part of maternal health?	50	0	100
2	Do any changes in dental health occur during pregnancy?	50	0	100
3	Gynecologists should refer the pregnant patient to the dentist on	50	0	100

	observing any oral clinical findings?			
4	Do you advise your patients to use fluoridated toothpaste?	0	50	0
5	Do you believe it is safe to use local anesthesia during pregnancy?	49	1	98
6	Can certain drug create oral side effects in the fetus when taken during pregnancy?	50	0	100
7	Do you think the dental reference is important for your patients?	50	0	100
8	Do you advise major/minor oral surgery during pregnancy?	26	24	53.3
9	Do you advice pregnant women to delay dental treatment until pregnancy?	0	50	0
10	Have patients reported about mobility/bleeding gums during pregnancy?	50	0	100
11	Do you advise the patient to quit	50	0	100

	tobacco/alcohol?			
12	Can Gum /Periodontal disease in the mother affect the preterm birth, low weight and gestation diabetes of child?	47	3	94
13	Do hormonal changes hinders the body ability for repair of soft tissue?	38	12	76
14	Dental treatment can be delivered safely at any time during pregnancy?	30	20	60

Result for table 2: The result of the fourteen questionnaire is mentioned itself in table.

Table 3: Safest trimester of pregnancy for the provision of dental treatment.

Trimester	Yes	No
First trimester	0%	100%
Second trimester	50(100%)	0%
Third trimester	0%	100%

Result for table 3: In present study 100% gynecologist stated that second trimester is safe for any minor procedure.

Table 4: Recommendation of pharmaceuticals for pregnant patients

S. N.	Drug name	Always	Sometimes	Never
1.	Paracetamol	20(40%)	30(60%)	0
2.	Ibuprofen'	2(4%)	26(52%)	22(44%)
3.	Aspirin	2(4%)	22(44%)	16(52%)
4.	Doxycyclin	3(6%)	3(6%)	44(88%)
5.	Penicillin	3(6%)	13(26%)	34(68%)
6.	Metronidazole	2(4%)	45(98%)	3(6%)
7.	Consult a gynecologist before prescribing any drug	50(100%)		

Result for table 4: The present study indicated the use of analgesics, Paracetamol was the first choice of the drug by 60% Ibuprofen 44% and aspirin 52% which is also given in an emergency.

Table 5: Sources of information regarding association between oral health and pregnancy.

Dental treatment/procedures	Yes		No
Scalling, filling, crowns, extraction	50(100%)		
Root canal treatment	Yes	Sometimes	No
	20(40%)	30(60%)	
Intraoral/extraoral radiographs			50(100%)
Administrating local anesthetic injections	50(100%)		

Result for table 5: According to this study Scalling, Restorations, Crowns and Extraction and Administrating Local Anesthesia is recommended by the majority of the

gynecologist, 60% said Root Canal can be treated as an emergency in the second and third trimester. Extensive and prolonged dental procedures should be postponed till after delivery and radiographs are strictly prohibited.

Discussion

Dental awareness of a qualified medical practitioner may be inadequate with regard to knowledge about dental diseases, oral hygiene practice and special treatment rendered by the dental practitioner. There are very few studies reported in the literature on the oral health awareness of medical practitioners in particular gynecologists.. Also little is known about the incidence of dental problems in their practice. Shah et al⁴

Although the overall knowledge level of the gynecologist was satisfactory in the present study, however, there still exist minor misconceptions amongst Gynecologists regarding the provision of dental treatments during pregnancy. This is of importance to the dentists as it acts as a barrier for them in providing the most appropriate treatment to their pregnant patients. Such misconceptions should be clarified in order to stop compromising on the quality of dental care due to unnecessary fears developed among patients.

In present study, 98.3 % gynecologist were aware of gum/periodontal disease which does not coincide with the results of the study conducted by Subramaniam et al⁸. Whereas, awareness regarding the side effect of drugs used during pregnancy was almost similar. Sandhya Patil, Rachna Thakur et al². Analysed the data which demonstrated that 98% of general dentists felt that delay in dental treatment affect both the mother and the child. In this study, 100% gynecologist said the second trimester is safe for any minor procedure. Raghad Hashim et al³ stated that 92.6% regarded the second trimester as the safest to receive dental treatment.

As to the indication of analgesics, Paracetamol was the first choice of the drug by 60% Ibuprofen 53% and aspirin 43% which is also given in an emergency. Nearly 88.8% of gynecologist contraindicated the use of aspirin during pregnancy this data was given by Sanadya Patil et al ². Mustafa Naseem et al ¹ suggested that ibuprofen is recommended in first and second trimesters. Metronidazole classified in group B is prohibited to be used in the first trimester as the drug has teratogenic effects.

In present study Scalling, Filling, Crowns and Extraction and administrating Aocal Anesthesia is recommended by the majority of the gynecologist, 60% said Root Canal can be treated sometimes as an emergency and radiographs is strictly prohibited. Raghad Hashim et al ³ suggested that 59.3% considered the administration of local anesthesia to be unsafe during pregnancy.

Low birth weight, Pre-term birth, and Pre-eclampsia have been associated with maternal periodontitis exposure. But the strength of the observed associations was inconsistent and vary according to the population studied, the means of periodontal assessment and the periodontal disease classification employed. However, the best is that the risk of low birth weight can be reduced with very simple therapy. Treatment of periodontal disease during gestation period is safe and a reduction in the inflammatory burden reduces the risk of preterm birth as well as low birth weight reported by Gabriella et al ⁵.

It has long been known that risk factors such as alcohol, smoking, and drug abuse contribute to increasing the risk of low birth weight babies. But recent studies have provided new evidence that periodontal disease in pregnant women may be a significant risk factor for preterm low birth weight. A number of studies also suggested that 18% of all low birth weight cases may be attributable to the periodontal disease. It now appears that

periodontal disease stimulates the body to release chemicals that can induce labor. Study data also suggested that if a pregnant women's periodontal condition worsened during pregnancy, it will create an even greater risk of premature birth as reported by amit et al ⁶. In present study, 94% of gynecologist agreed with the same. Thus, if the mother's nutritional needs are not met during this period, all aspects of the mother's health can suffer. While any infection is a concern for pregnant women because it poses an increased health risk to the fetus, which is equally stressful to the mother's health. This makes taking care of any existing gum infection prior to conception and maintaining optimal oral health an important factor. ⁶

Conclusion

- The present study revealed that the majority of gynecologists had good knowledge, attitude, and practices regarding the oral health of expectant mothers. Therefore Gynecologist should encourage every pregnant woman to have a complete oral health examination.
- A multidisciplinary team that includes the family physician, Gynecologists, and dental practitioner should assume an active role in providing health education to both pregnant women and child which can significantly decrease the possibility of oral diseases.
- Low birth weight, pre-term birth, and pre-eclampsia have been associated with maternal periodontitis exposure, or medications prescribed during that duration, therefore periodic oral health examinations should be done during pregnancy to ensure there is no gum disease present.

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