RESEARCH ARTICLE

Knowledge, Attitude and Practices among Gynecologists Regarding Oral Health of Expectant Mothers of South Bengaluru, Karnataka

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Abstract

Background: To evaluate the knowledge perspective and trainings among gynecologists' considering oral health of pregnant mothers of South Bengaluru city, by questionnaire.

Materials and methods: A total of 60 gynecologists are included in the study. Prior to the study, the questionnaire was pretested by Pedodontist. The questionnaire was administered on the first day of visit, and on the next day it was collected back.

Results: The research unveiled that a greater number of gynecologists had satisfactory knowledge attitude and training concerning oral health of expectant mothers.

Conclusion: The predominance of gynecologists has satisfying knowledge perspective as well as practices, but still there is a demand for better effective attendance and involvement of medical specialists like gynecologists and pediatricians in continuing the education programs and forums on dentistry.

Keywords: Expectant mother, Gynecologists, Oral health.

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Introduction

Pregnancy is an exceptional and fragile condition for a lady, which is related with horde and complex passionate and physiological changes in various pieces of the body including oral cavity and dental well-being.[1] Changes during pregnancy is the consequence of an expanded creation of different chemicals like estrogens, progesterone, gonadotropins, and relaxin, which can prompt a provocative reaction and expanded porousness of veins, in this way causing gum disease and periodontitis.[2] These hormonal changes lead to dietary changes just as expanded sickness and spewing, and dismissed oral cleanliness rehearses which add to changes in salivary pH which thus tend to expand the frequency of dental caries, inciting microbiological changes in the oral cavity, and insusceptible concealment.[3]

Studies recommend that oppressed oral well-being during pregnancy can add to perinatal intricacies, for example, low birth weight and preterm conveyance just as helpless oral well-being in youngsters. The most noteworthy evaluations of low birth weight infants are distributed from Asia, and the recurrence in India is totally enormous around 20%. In 1996, Offenbacher et al. originally uncovered a relationship between periodontal infection and preterm conveyance. While certain examinations communicated a relationship between periodontal illness and perinatal difficulties, the causal affirmation is not exact.[2]

A background marked by cavities or dynamic caries in mothers is an indicator for early childhood caries (ECC). Early childhood caries is quite possibly the most ongoing dental confusion between 1 and 5 years of children affecting 5–94% youngsters universally. Children experience dental pain and problems with chewing, communicating, and socializing. Tooth development disorder, delayed eruptions, and damage to permanent dentition can be due to ECC.

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The prime duty of perinatal oral health care, in relation to transmission of caries, is quantitative reduction of cariogenic bacteria in the oral cavity of pregnant mothers, which might delay the mutans streptococci (MS) colonization. Appropriate delivery of informative instruction and precautionary remedies to them can lower the frequency of ECC, restrict the demand for dental rehabilitation, and develop the oral health of their children.

A general view of physiological changes on body systems and oral cavity during pregnancy is shown in Figures 1 and 2,

respectively, and Flowchart 1 represents oral healthcare measures that need to be adopted during pregnancy.[5] Perinatal oral health performs certain relevant role in overall health and well-being of pregnant women and their newborn child. Studies have shown that during pregnancy oral health is neglected by women, particularly among women of low socioeconomic status.

Many investigations announced helpless oral well-being status of pregnant ladies when contrasted and the partners of a similar age. As per the examination, 76.10% hopeful mothers encountered a couple of oral issues, while barely 31% of them visited a dental specialist. Utilization of dental administrations by pregnant ladies was viewed as oppressed. Ladies will generally visit gynecologists more as often as possible than other clinical experts; henceforth, they assume a significant part in the soundness of ladies and the sky is the limit from there so for the pregnant ladies to make them mindful of the issues. Gynecologists can loan some assistance to beat the apparent obstructions for an oral exam like long holding up hours, distance, and negative demeanor of well-being experts.[6] Thus, the prime precautionary way toward oral health is relevant for women by combined and coordinated efforts of dentists and gynecologists.[7]

As far as anyone is concerned, there are not many investigations which have surveyed the information, disposition, and practice of gynecologists about the counteraction of oral illnesses in pregnant ladies. Thus, our aim was to assess the knowledge, attitude, and practices among gynecologists regarding oral health of expectant mothers in south Bengaluru city, by questionnaire.

Materials and Methods

This was a cross-sectional study done in South Bengaluru.

A total of 60 gynecologists from private and government hospitals and private clinic were interviewed for the study. Gynecologists who were not ready to partake in the study were excluded from the study.

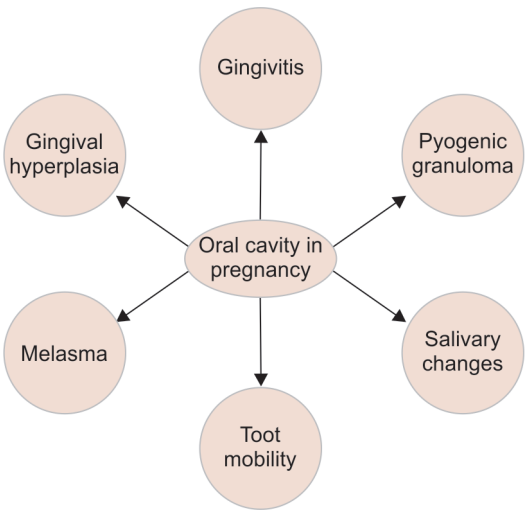

Fig. 1: Key physiological changes observed in various body systems during pregnancy

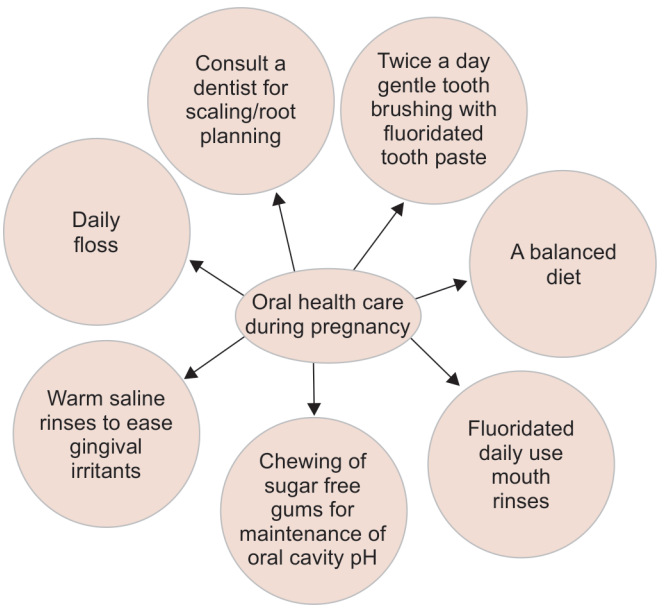

Fig. 2: Key oral changes and conditions during pregnancy

Flowchart 1: Oral healthcare measures need to be adopted during pregnancy

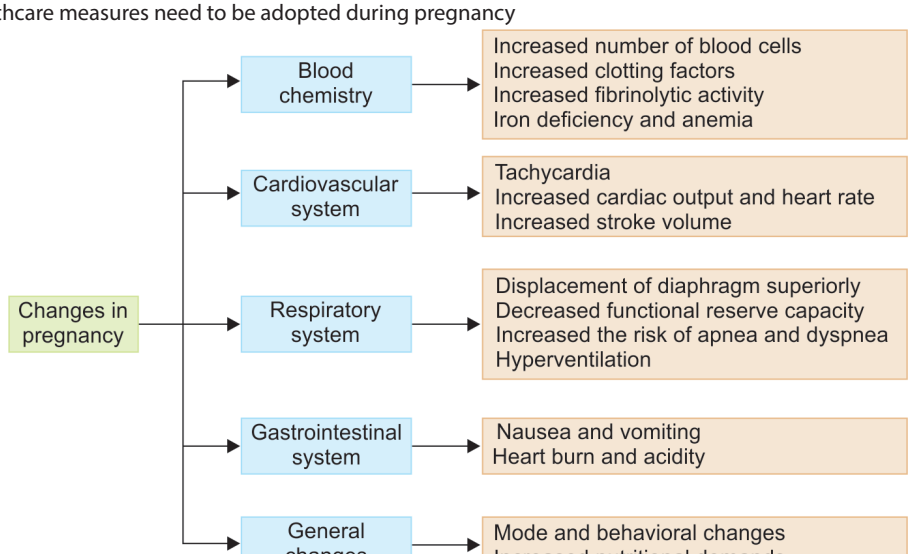

Table 1: Demographic characteristics of study participants

Variable	*Category*	*No.*	*%*
Gender	Male	1	1.6
	Female	59	98.7
Age	30–35	25	41.6
	36–40	21	35
	41–45	14	23.4
Duration of practice	1–5 years	25	41.6
	6–10 years	23	38.3
	>10 years	12	20.1
Sector	Government	20	33.3
	Private	40	66.7

An organized questionnaire was planned. The questionnaire was pretested by five Pedodontists in the Department of Pediatric and Preventive Dentistry, VS Dental College, Bengaluru before use in the field, to look at the degree to which gynecologists could undoubtedly comprehend its substance. The questionnaire enveloped requests that planned to examine the information and practice practices of the gynecologists toward the oral medical care of the pregnant patients. The questionnaire distribution was conducted all 7 days of week from Monday to Sunday. Each specialist was given a data sheet clarifying the nature and motivation of the study.

For every gynecologist, the questionnaire was controlled on the first day of visit and on the following day it was gathered back. The members who had not topped off the survey on the second day of visit were mentioned to give it in an additional 2 days.

The data were analyzed by applying descriptive and inferential statistical analysis. Pearson's Chi-square test was used for statistical analysis.

At significance level $p < 0.05$.

Results

Table 1 illustrates the demographic data of the study. Out of 60 gynecologists, 59 (98.7%) female and only one male gynecologist participated in the study.

Table 2 illustrates about the knowledge, attitude, and practice behavior of gynecologists according to the questions asked.

Overall from the study it was seen that gynecologists have enough knowledge and attitude about the consequence of pregnancy over oral health of mother and child, but still they failed to pursue that knowledge and attitude in regular practice.

They provide diet plan to patients, but they do not guide for oral health maintenance as during pregnancy due to hormonal changes many times a pregnant women can consume sweets and eat during midnight and sleep after without brushing; hence being health workers of this society it is our duty to guide our patients accordingly. So, a good collaboration between gynecologist and a dentist is required for the best results.

Discussion

Generally, the degree of information in the current overview mirrored that gynecologists know about the different pregnancy-related oral well-being changes and outcomes. There are not very many investigations announced in writing on the oral well-being familiarity with clinical professional specifically gynecologists.

Albeit the general information level of the gynecologists was palatable in this study, nonetheless, there actually exist minor confusions and indistinct information on how much these experts are knowing about oral well-being and the degree to which they may currently be partaking in the counteraction and appraisal. This is of significance to the dental specialists as it goes about as an obstruction for them in giving the most proper prebirth oral medical care and therapy to their pregnant patients. Such misguided judgment and inadequate information should be explained to quit including on the nature of dental consideration because of superfluous apprehensions created among patients.[8]

The benefit of a survey study is that it permits data to be gathered and dissected effectively, and it additionally permits the concerned expert to communicate uninhibitedly their insight on oral medical services.

In the current study, it was seen that the majority of the gynecologists had great information, disposition, and work on with respect to oral well-being of eager mother. The majority of the gynecologists advice diet counseling, which correlates to the finding of the study conducted by Subramanium and Harsh et al.[9]

In the present study, 76.7% of gynecologists were aware of the side effect of gum/periodontal disease, but compared to the other studies conducted by Raghad et al. and Harsh percentage of awareness was higher.[8,9]

About 16.7% gynecologist advised fluoridated tooth paste as compared to the study conducted by Harsh et al., where around 42.1% gynecologist advised fluoridated tooth paste.[9]

In our study, 78.3% gynecologists showed positive attitude in terms of referring patients to dentist. In the previous studies conducted by Harsh et al., Varun et al., and Sapna et al. this attitude ranged between 24.3%, 40%, and 93.9%, respectively.[9,2,6]

Around 66.7% of the gynecologists in the study conducted by Raghad concurred that periodontal sickness in mothers might prompt preterm low birth weight children, while in the current review 76.7% of the gynecologists knew about the reality.[8]

Study conducted by Deshpande et al. showed that only 46.7% gynecologists advised use of local anesthesia during pregnancy as compared to our study, where 75% gynecologists advised local anesthesia during pregnancy for dental treatment.[4]

Only 20% gynecologists said that dental X-rays are safe during pregnancy, but the study conducted by Varun et al. reported 47% gynecologists who said that dental X-rays are safe.[2]

This investigation discovered that despite the fact that obstetricians for the most part had great information about the

Table 2: Assessment of the knowledge, attitude and practices among gynecologists

	No. of gynecologist's (n=60)	**%**
Do you advice your patients to use fluoridated tooth paste?		
Yes	10	16.7
No	50	83.3
Do you think dental references are important for your patients during pregnancy?		
Yes	47	78.3
No	13	21.7
Do you refer your patients to dentist?		
Yes	20	33.3
No	40	66.7
Do you feel examination of oral cavity should be an integral part of pregnancy?		
Yes	44	73.3
No	16	26.7
Do you check the oral cavity of expectant mothers?		
Yes	18	30.0
No	42	70.0
Can certain drugs create oral side effects in fetus when taken during pregnancy?		
Yes	59	98.3
No	1	1.7
Do any changes in dental health occur during pregnancy?		
Yes	42	70.0
No	18	30.0
Do you think attending a conference on oral health will be beneficial for you?		
Yes	39	65.0
No	21	35.0
Do you advice major/minor dental surgery during pregnancy?		
Yes	18	30.0
No	42	70.0
Do you advice diet counseling to your patient?		
Yes	60	100.0
No	0	0.0
Do you advice patient to quit tobacco/alcohol?		
Yes	60	100.0
No	0	0.0
Can gum disease in the mother affect the birth weight of child?		
Yes	46	76.7
No	14	23.3
Do you think that patients' attitude toward dental care is related to maternal health?		
Yes	54	90.0
No	6	10.0
Diagnostic dental X-ray can be taken during pregnancy?		
Yes	20	33.3
No	40	66.7
Use of local anesthesia is safe during pregnancy to carry out dental treatment?		
Yes	45	75.0
No	15	25.0
Second trimester is the safest period to take dental treatment?		
Yes	53	88.3
No	7	11.7

$p < 0.05$ - Significant

connection between oral well-being and pregnancy results, many did not make this difference to their own training. While most feel that the joint discussions with dental specialists before mediations are something worth being thankful for, and furthermore there should be joint meeting where dental specialists and obstetricians can share information and think of the plans to lessen the pregnancy results by expanding mindfulness in the patients and their families.

Conclusion

Management of the oral diseases among pregnant women is a multidisciplinary approach which requires a team of family physician, gynecologists, and dental practitioner to provide health education, which will provide considerable protection form oral diseases.

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