



An assessment of gynaecologists' understanding of oral health issues during pregnancy

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Abstract:

A cross-sectional research was conducted to assess gynaecologists' knowledge of and behaviours related to oral health during pregnancy and the relationship between periodontal disease and unfavourable pregnancy outcomes. The researchers were particularly curious to know whether gynaecologists were aware of the adverse outcomes.

Materials and Methods:

One hundred and twenty gynaecologists took part in this study. A self-structured, closed-ended questionnaire with a total of 22 items was chosen. The principal investigator personally contacted the gynaecologists and obtained their informed consent before giving each of them a questionnaire.

Results:

According to the results, 200 gynaecologists in all were contacted, and 200 of them responded to the questionnaire. As a result, there was a 100% response rate. The majority of respondents (87%) said there is a link between good dental health and pregnancy, and 63% said periodontal disease can affect how a pregnancy turns out. Only 60% of gynaecologists, however, advise women to have major or minor surgery while they are expecting, and 74% of them think that getting dental work done is most secure during the second trimester. More than half of participants (74%) thought using local anaesthetic was risky during pregnancy, and over three quarters (79%) thought dental x-rays were harmful to take.

Conclusion:

This study showed that gynaecologists have a relatively good level of awareness regarding the state of oral health during pregnancy as well as the connection between periodontal disease and the results of pregnancy. There are, however, undoubtedly many urban legends concerning having



dental treatment while pregnant. Pregnant women and the medical community need to have access to more information in order to deliver better oral health care. Gynecologists, who serve as the first line of treatment for pregnant patients, should take note of this in particular. Misconceptions regarding the kinds of dental procedures that can be done while pregnant also need to be dispelled. Some of the terms that will be used in this article are gynaecologist, information, misconceptions, oral health status, periodontal disease, and pregnancy results.

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INTRODUCTION

Pregnancy causes significant hormonal and other changes in a woman's body, which profoundly affect virtually every organ system, including the oral cavity. Gingivitis and periodontal infection are the two dental health conditions that affect pregnant women most frequently. [1] The topic of women's oral health during pregnancy has drawn a lot of attention for a very long time. During pregnancy, it involves a number of important changes that are both physical and hormonal and have a big influence. [2] Pregnant women with periodontitis may be more likely to give birth to preterm infants or children who are underweight when they are delivered (PLBW). [3] Studies have shown that periodontal disease may be the cause of 18.2% of all PLBW cases. [4] Despite the fact that the exact processes by which periodontal illnesses may result in preterm delivery and/or low birth weight have not been determined, one potential explanation involves the mother's urinary tract infections being contaminated with bacteria from periodontal disease. This is due to the fact that periodontal disease can lead to germs from periodontal disease being present in a mother's urinary system. [5,6,7] Gynecologists are the main medical professionals who regularly evaluate and treat women throughout their lives and have ongoing interaction with pregnant patients. Gynecologists are the primary medical

practitioners who identify and treat female infertility. [8,9] By better knowing how aware people are of the link between periodontal disease and pregnancy outcomes, it may be feasible to improve the outcomes of pregnancies and lower the incidence of preterm deliveries. [10] The aim of this study was to ascertain the knowledge, understanding, and practises of gynaecologists about oral health care during pregnancy and the relationship between periodontal disease and poor pregnancy outcomes in Chennai.

Materials and procedures

Gynecologists who were randomly selected to participate in this cross-sectional study were conducted in India. In this study, 200 gynaecologists participated in it and sent back questionnaires that were fully filled out. Gynecologists employed by both publicly funded and privately managed hospitals and clinics in XXXX provided all of the information. There were 22 items in the self-structured, closed-ended questionnaire that was created. After personally speaking with the gynaecologists and receiving their informed permission, the principal investigator gave each one a questionnaire. Their right to seclusion had been upheld. Within the allotted five minutes, the answers were supplied to the investigator immediately. A list of the questions is provided in Table 1.



Table 1
 Questionnaire

S. no.	Questions	Reply
1.	Do you believe that there is a higher chance of gingival inflammation during pregnancy?	Yes/No
2.	Have any of your patients mentioned experiencing tooth movement, minor edoema, or bleeding gums while pregnant?	Yes/No
3.	Do you suggest pregnant women put off going to the dentist after giving birth?	Yes/No
4.	Do you think it's okay for pregnant patients to use the standard local anaesthetic solution that contains a vasoconstrictor?	Yes/No
5.	Do you believe that having a dental radiograph while pregnant is safe?	Yes/No
6.	Do you think gingival and periodontal inflammation may have an impact on a pregnancy's outcome?	Yes/No
7.	Do you believe that gum disease can cause premature birth or low birth weight?	Yes/No
8.	Advising a patient to see a dentist while pregnant?	Yes/No
9.	Do you have any knowledge of oral symptoms brought on by pregnancy-specific hormonal changes?	Yes/No
10.	Have you ever counselled a patient on any modifications to the oral cavity during pregnancy?	Yes/No
11.	Have you ever suggested to expectant mothers to practise proper oral hygiene and get regular dental exams?	Yes/No
12.	Do you believe that maternity health should include an oral cavity examination?	Yes/No
13.	Do you examine expectant mothers' mouths?	Yes/No
14.	Do you recommend having major or minor surgery while pregnant?	Yes/No
15.	Do you believe that stay updated with dental technology will be beneficial to you?	Yes/No
16.	Do you consider it beneficial to attend a conference on oral health?	Yes/No
17.	Do you suggest the patient give up alcohol or tobacco?	Yes/No
18.	Can gum disease in the mother have an impact on the baby's birth weight?	Yes/No
19.	Do you think that patient's attitude toward dental care is related to dental health?	Yes/No
20.	Do you recommend fluoridated tooth paste to your patients?	Yes/No
21.	Do you believe that a dental referral is crucial for your patient?	Yes/No
22.	Which trimester do you believe is appropriate for dental care?	
	I.First	Yes/No
	II.Second	Yes/No
	III.Third	Yes/No

Statistical analysis

Each and every returned questionnaire was categorised and carefully reviewed. The descriptive statistics were analysed using the SPSS statistical programme, and the findings were presented as the number and percentage of respondents for each question.

RESULTS A total of 120 of the gynaecologists who were qualified for the study chose to participate and returned questionnaires that were fully filled out, yielding a response rate of 100%; the results are shown in Table 2.

Table 2



Results

S. no.	Question asked	Total (200)		Total (100%)	
		Yes	No	Yes	No
1.	Do you believe that there is a higher chance of gingival inflammation during pregnancy?	122	71	63	35
2.	Have any of your patients mentioned experiencing tooth movement, minor edoema, or bleeding gums while pregnant?	141	58	71	29
3.	Do you suggest pregnant women put off going to the dentist after giving birth?	23	183	11	93
4.	Do you think it's okay for pregnant patients to use the standard local anaesthetic solution that contains a vasoconstrictor?	55	145	28	74
5.	Do you believe that having a dental radiograph while pregnant is safe?	43	157	21	79
6.	Do you think gingival and periodontal inflammation may have an impact on a pregnancy's outcome?	125	75	64	38
7.	Do you believe that gum disease can cause premature birth or low birth weight?	135	67	68	35
8.	Advising a patient to see a dentist while pregnant?	132	65	68	34
9.	Do you have any knowledge of oral symptoms brought on by pregnancy-specific hormonal changes?	101	97	51	49
10.	Have you ever counselled a patient on any modifications to the oral cavity during pregnancy?	137	61	68	32
11.	Have you ever suggested to expectant mothers to practise proper oral hygiene and get regular dental exams?	145	55	74	28
12.	Do you believe that maternity health should include an oral cavity examination?	188	19	90	10
13.	Do you examine expectant mothers' mouths?	127	75	64	38
14.	Do you recommend having major or minor surgery while pregnant?	62	141	31	71
15.	Do you believe that stay updated with dental technology will be beneficial to you?	177	21	89	13
16.	Do you consider it beneficial to attend a conference on oral health?	181	22	91	9
17.	Do you suggest the patient give up alcohol or tobacco?	107	95	54	48
18.	Can gum disease in the mother have an impact on the baby's birth weight?	127	75	62	36
19.	Do you think that patient's attitude toward dental care is related to dental health?	193	9	97	5
20.	Do you recommend fluoridated tooth paste to your patients?	99	101	47	50
21.	Do you believe that a dental referral is crucial for your patient?	147	53	75	27



22.	Which trimester do you believe is appropriate for dental care?				
	I.First	47	151	25	75
	II.Second	149	53	74	27
	III.Third	5	197	1	98

Pregnancy increases the likelihood of gingival inflammation, according to more than 64% of the individuals. In a similar vein, a sizable percentage of gynaecologists (87%) said there is a positive relationship between oral health and pregnancy. Additionally, according to 67% of respondents, gingival and periodontal inflammation might affect the course of a pregnancy, and 63% of respondents felt that periodontal disease can cause early labour and low birth weight.

Additionally, according to this study, 21% of gynaecologists thought intra- and extraoral radiographs were safe, 74% of gynaecologists thought using local anaesthesia that contained vasoconstrictors during pregnancy was risky, and 74% of gynaecologists thought the second trimester was the safest time for dental procedures.

DISCUSSION

To the best of our knowledge, this is the first study that has been published that was conducted in Chennai and aimed to ascertain the level of expertise held by the gynaecologists in relation to the relationship between periodontal disease and the outcomes of pregnancies. Despite the fact that the gynaecologists in this research had outstanding general knowledge, there are still a few minor misunderstandings about the delivery of dental treatments during pregnancy that are common among gynaecologists. Regarding the question of whether it is safe to take intra/extraoral radiographs of a pregnant patient, the majority of gynaecologists (79%) gave a negative response. Radiographs of the teeth are a crucial component in the diagnosis and treatment of a wide range of dental problems. [11,12] Numerous studies have found that it is

completely safe to take necessary intraoral and extraoral dental x-rays of pregnant women, and that these x-rays pose no risk to the developing child.

Another widespread misconception about treating pregnant women's oral health is avoiding the use of local anaesthetics that contain vasoconstrictors. The great majority of responders (74%) believed that pregnant women should avoid local anaesthetics based on vasoconstrictor drugs. [10,13] Conventional dental anaesthetics that contain vasoconstrictors can be used safely when pregnant, according to research[14]. [Needs citation] There are some serious limitations to this research. On the other hand, the results of this study can act as the basis for upcoming programmes of continuing education for gynaecologists practising in XXXX.

CONCLUSION

Maternal health care professionals play a critical role in promoting great oral health and avoiding oral illnesses by making it easier for pregnant women to get dental treatment. Gynecologists showed some level of skill in this study, but there are still some misunderstandings among them about the types of dental treatment that can be given while pregnant. The medical community, especially gynaecologists, who serve as the major providers of healthcare for pregnant women, has to be made more aware of the need to give improved oral health care to both pregnant people and the medical community. To assist decrease the likelihood of maternal and newborn difficulties, misconceptions about the kinds of dental procedures that can be done during pregnancy should also be explained. a



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