ORIGINAL RESEARCH PAPER
Volume - 9 | Issue - 6 | June - 2020 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A QUESTIONNAIRE-BASED SURVEY OF GYNECOLOGISTS AND PREGNANT LADIES' ATTITUDES AND KNOWLEDGE REGARDING THE ASSOCIATION BETWEEN PERIODONTAL HEALTH AND PREGNANCY OUTCOMES.

Periodontology

Dr Sweety Agarwal* Senior Resident, Department of Periodontology, YMT Dental College, Navi Mumbai *Corresponding Author

Dr Abha Hedaoo Junior Resident, Department of Periodontology, YMT Dental College, Navi Mumbai

Dr Asha Prabhu Professor, Department of Periodontology, YMT Dental College, Navi Mumbai

ABSTRACT

Introduction: It has been established that pregnancy and periodontal health have bidirectional relationship leading to damage of periodontium and also posing adverse effects on maternal as well as child's overall health. There is little information about the knowledge and attitudes of gynecologists and pregnant females regarding oral and periodontal care whilst pregnancy.

Aim: To assess the attitude and knowledge of gynecologists and pregnant females regarding maintenance of oral health and in particular periodontal health during pregnancy.

Methodology: Multi-center questionnaire-based survey of 187 gynecologists and 623 pregnant ladies across maternity homes in Mumbai was undertaken.

Results and conclusion: The data obtained established that though gynecologists are aware about adverse effects, if oral health is not looked upon, do not consider maintaining oral health of prime importance during pregnancy. Also, inherent lack of knowledge and awareness amongst pregnant females regarding oral health maintenance was concluded

KEYWORDS

pregnancy, periodontal care, pregnancy tumor.

INTRODUCTION

A number of physiological events occurring in life of women can have impact on oral health. These events include puberty, pregnancy as well as menopause. Of all the conditions stated, pregnancy is period of excitement as well as anxiety in women's life. It is characterized by physiological changes in her body for which female sex hormones are primarily responsible. A number of oral changes are inevitable during phase of pregnancy many of which are reversible. These changes include gingivitis, benign gingival lesions, dental erosions etc. There is increasing evidence linking the association and bidirectional relationship of oral health in particular periodontal health and adverse pregnancy outcomes.[1] Associated risks include preterm birth, low birth weight babies, pre-eclampsia. Although mechanisms linking association between periodontal diseases and pre-term birth and/or low birth weight have not been completely established, one proposed mechanism relates to hematogenous spread/seeding of urinary tract infections with periodontopathic microorganisms. Another mechanism is, where inflamed periodontal tissues produce excess of pro-inflammatory cytokines, which may have systemic effects on the host.[2] On the other hand, estrogen and progesterone contribute to periodontal inflammation by stimulating prostaglandin synthesis in the gingiva of pregnant women. Also, these hormones serve as essential growth factors for Prevotella intermedia, which show a marked increase in the subgingival plaque during pregnancy.

Maintenance of optimal oral health in pregnant women has its own benefits, however it has been hampered by myths surrounding the safety of dental care during pregnancy. Many women fail to understand importance of oral care in pregnancy while others experience barriers to care. Whilst they are busy preparing the arrival of the child, and are keen about proper growth and development of the baby, oral and other not so important problems are being neglected heavily.

The gynecologists are most important via media through which this knowledge of maintaining oral care can be passed upon to pregnant females. A survey carried out by R Al-Habashneh,[3] in Jordan amongst medical doctors reported that physicians do not routinely advise their patient to seek dental care during pregnancy. Also, according to this survey, general practitioners were less informed about oral health practices on pregnant women.

Although there is ample literature regarding the oral health status of expecting mothers, insufficient data is available from the Indian subcontinent regarding their awareness and motivation of these pregnant women towards maintenance of good oral hygiene and regular dental checkups during pregnancy. Also, it was doomed important to explore whether healthcare providers in particular gynecologist are knowledgeable about the relationships between periodontal diseases and pregnancy outcomes, and modify their interactions and treatment /for this group of patients.

Thus, the aim of this survey was to assess the attitude and knowledge of gynecologists and pregnant females regarding maintenance of oral health and in particular periodontal health during pregnancy.

MATERIALS AND METHODS:

A multicenter, cross sectional questionnaire-based survey of pregnant women attending for their needs at various maternity homes all over Mumbai was carried out. Also, the concerned gynecologists were surveyed. Written permission was obtained from the management and directors of the maternity homes. The study was approved by the ethical committee of the institution.

A questionnaire in English as well as in the regional language was prepared and validated and checked for ambiguity. All pregnant women and gynecologists ready to give written consent and willing to participate in the study were included. The questionnaire contained 18 questions (both open and close ended) for the pregnant women and 15 questions for gynecologists. The questionnaire for pregnant women was structured and was designed to assess the attitude and knowledge they had about oral health and importance of its maintenance during pregnancy. Also, questions were asked to assess if they experienced any dental or periodontal issues during pregnancy and if yes, what was the treatment that they undertook.

A total of 623 pregnant ladies and 187 gynecologists participated in this survey. All the information that was obtained was kept confidential and was analyzed.

STATISTICAL ANALYSIS

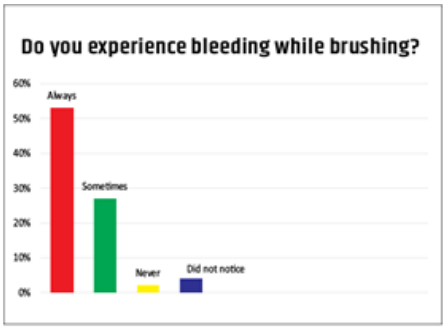
Data collected was entered into spreadsheets in MS Excel and was subjected to statistical analysis SPSS 15.0. The total score including that of the sub options were added up and were divided by the number of participants to obtain mean value and percentage. Also, MS Excel was used to tabulate the results in graphs, charts and pie diagram.

RESULTS

The majority (78%) of the pregnant ladies were in the age range of 25-30 years. And the rest of them were mostly above 30 years. Around 54% of them were literate and above. In the gynecologist's group, most of them (72%) were above 35 years and were practicing for 5 years and above.

The mean level knowledge in percentage of attitude of pregnant ladies

was 23.8. Around 54% always noticed bleeding while brushing, while around 28% never experienced bleeding from gums. (Graph 1)



Graph 1

54% were not aware if pregnancy causes gum problems. (Figure 1) Around 46% were oblivious about the relation between oral health and pregnancy outcomes.

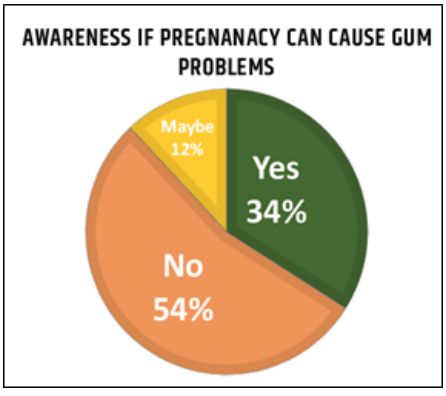


Figure 1

70% of ladies did not feel important to visit dentist during pregnancy for their oral issues. As much as 89% ladies had a notion that dental treatment during pregnancy is harmful to the developing child. Around 38% had conveyed their oral problems to the gynecologist and most of them were prescribed pain killer for the same.

For the gynecologists, almost all of them were aware about the oral problems that are perceived during pregnancy. 42% advice dental checkup as a part of their planned pregnancy protocol. Around 68% have prescribed analgesics for dental pain. All the gynecologists liked the idea of having an inhouse dentist in their maternal homes to cater to the oral issues of the pregnant ladies. A whopping 98% agreed to make dental checkup mandatory before and while being pregnant.

DISCUSSION:

This survey was conducted with a thought to assess the attitude of both the pregnant ladies and gynecologists pertaining to oral health and in particular periodontal health status during pregnancy. According to the consensus by American Academy of Periodontology, there is evidence linking poor oral (periodontal) health to pregnancy outcomes.[1] The results of this survey have brought to light about the negligence of oral hygiene in pregnant ladies. Due to the social myths in the society, they consider dental treatment to be harmful for the fetus.

It has been clearly established that poor periodontal health during pregnancy is associated with a 7-fold increase in pre term labor as well as low birth weight.[4] Considering the potential adverse outcomes, it becomes imperative to instill in the minds of the pregnant ladies about the importance and need of oral health maintenance during pregnancy.

As a part of the questionnaire, a response was asked from the gynecologists about the inclusion of dental checkup before pregnancy. Most of the gynecologist agreed to this idea and planned to implement the same in their future practice. But on the other hand, the gynecologists did not consider oral health maintenance whilst and post pregnancy of prime importance. A moderate to poor association between poor periodontal status and adverse pregnancy outcome was reported by 41% of them. This highlights the need of instilling the bidirectional relation model to the gynecologists, understanding which they can convey the importance of periodontal health maintenance to their patients. This could be carried out by small talks and joint conferences of the dentists as well as the gynecologists.

The results of our present survey are in accordance with the study carried out by George et al,[5] R Al-Habashneh et al,[3] Chaitra et al.[6] All these authors have concluded the need for increased oral health awareness.

Considering the results obtained from this survey, it would be a wise idea to portray the need for maintenance and timely treatment of periodontal and other oral health issues whilst pregnancy. The information's can be portrayed via small clippings and advertisement. Also, the role of gynecologists in conveying this information to their patients can be beneficial.

The need for an inhouse dentist in maternal homes was put forth to the gynecologists and most of them agreed for the same. If this concept is implemented, adverse pregnancy outcomes arising due to poor periodontal health can be prevented to a large extent.

Till date, no study has been carried out to assess the knowledge and attitude of both the pregnant women as well as the gynecologists towards periodontal care, hence this study was implemented.

The limitation of this survey was that the oral health status was assessed only on the basis of the questionnaire. A large-scale study including periodontal and oral health checkup by the dental professional should be carried out. The generalizability of this survey is limited and should be extrapolated with caution as it was carried out in a single city study.

CONCLUSION:

The overall results suggest that knowledge and practices of pregnant women need to be greatly improved. Also, the gynecologists should advice their patients for the need of oral health. Proper counselling of the pregnant ladies should be done and importance of maintaining and adverse outcome of not maintaining good oral health should be explained. Measures should be undertaken to implement oral health care as a part of regular antenatal care.

REFERENCES:

1) Offenbacher S, Lieff S, Boggess KA, et al. Maternal periodontitis and prematurity, I: obstetric outcome of prematurity and growth restriction. Ann Periodontol 2001; 6(1): 164-74.
2) Lopez NJ, Smith PC, Gutierrez J. Higher risk of preterm birth and low birth weight in women with periodontal disease. J Dent Res 2002; 81(1): 58-63.
3) Al-Habashneh R, Aljundi SH, Alwaeli HA. Survey Of medical doctors' attitudes and knowledge of the association between oral health and pregnancy outcomes. Int J Dent Hygiene, 2008; 6: 214–220.
4) Moore S, Ide M, Coward PY, et al. A prospective study to investigate the relationship between periodontal disease and adverse pregnancy outcome. Br Dent J 2004; 197:251-8; discussion 247.
5) George A, Johnson M, Blinkhorn A, Ajwani S, Bhole S, Yeo AE, Ellis S, The oral health status, practices and knowledge of pregnant women in south-western Sydney, Aust Dent J; 2013; 58: 26–33.
6) Chaitra TR, Wagh S, Sultan S, Chaudhary S, Manuja N, Sinha AA. Knowledge, attitude, and practice of oral health and adverse pregnancy outcomes among rural and urban pregnant women of Moradabad, Uttar Pradesh, India. J Interdiscip Dentistry 2018; 8:5-12.