Research Article

JRAD Journal of Research and Advancement in Dentistry

J Res Adv Dent 2017;7:1:25-29.

Knowledge and Attitude of Gyenaecologists Towards Oral Health Care Among Pregnant Women in Amalapuram

G. Priyanka[1*]

[1]MDS, Department of Public Health Dentisry, KIMS Dental College, Amalapuram, Andhra Pradesh, India.

ABSTRACT

Background: To assess the Knowledge, Attitude of Gynecologists towards oral health care in pregnant women.

Materials and methods: A cross-sectional questionnaire based survey was conducted among Gynecologists in Amalapuram. A pretested close ended questionnaire was prepared and distributed.

Results: A total of 56 Gynecologists participated in the study (Female=53, Male=3). Seventy five percent of them strongly agreed that oral health is an important component of a pregnant women's general health and most of them (73.2%) agreed that Gynecologist has an important role in promoting their patient's oral health. Forty eight percent of them strongly agreed that usage of tetracycline during pregnancy will adversely affect the child's teeth.

Conclusion: As Gynecologists are the primary health care providers they need to know about dental health science to educate their patients. There is a need for conducting Continuing Medical Education programs for them.

Keywords: Gynecologists, pregnant women, pre term low birth weight.

INTRODUCTION

Pregnancy is a unique time in women's life. The numerous physical and physiological changes that occur during pregnancy affect every major body system and result in localized physical alterations in many parts of the body, including the oral cavity. Increased levels of hormones such as estrogen and progesterone are related to increased permeability of oral vasculature and decreased host immune competency. This would then increase the tendency and severity of oral inflammation in reaction to bacterial, physical and chemical irritations.[1]

Changes in the oral cavity during pregnancy, particularly those involving the periodontium, have been well documented.[2] Periodontal infections during pregnancy not only affect the mother, but may also cause harm to the fetus if left untreated.[3] Recent studies have shown that gingivitis and periodontal infection during pregnancy represent an independent risk factor for pregnancy outcomes and pregnancy gingivitis is considered the most common oral manifestation of pregnancy and has been reported as occurring in upto thirty percent of pregnant women.[4-5]

Gynaecologists are the providers of primary health care for pregnant women. Gynecologists can more easily motivate her to practice good health including oral health. Oral health knowledge is considered to be an essential prerequisite for Gynaecologists.

Received: June. 11, 2017: **Accepted**: July. 19, 2017
***Correspondence Dr. Priyanka G.**
Department of Public Health Dentisry, KIMS Dental College, Amalapuram, Andhra Pradesh, India.
Email: Not Disclosed

pISSN 2278-0076
eISSN 2321-9270

Hence Gynaecologists should have knowledge about oral health to guide their patients and to promote oral health. Very few studies are available regarding the knowledge of Gynaecologists about oral health in India.[6-8] So the aim of the study was to assess the knowledge and attitude of Gynaecologists towards oral health in pregnant women.

MATERIALS AND METHODS

A cross-sectional questionnaire based survey was conducted among Gynaecologists in the month of October 2010. A total of 56 Gynaecologists (Female =53, Male= 3) participated in the study. Survey instruments: A close ended questionnaire was used. Questionnaire was prepared based on existing literature.[6-8] Ethical consent: Ethical clearance was obtained prior to the start of the study from the ethical committee of KIMS Dental College, Amalapuram. Pilot study: A pilot study was carried out with a convenient sample of 5 Gynaecologists using a questionnaire comprising of 18 close ended questions to assess the feasibility and understanding of the questions.

Finally, a close ended questionnaire comprising 12 questions was prepared. Answers for each question were indicated by 5 point Likert scale. (strongly agree, disagree, not sure, disagree, strongly disagree).The questionnaire comprised of questions pertaining to knowledge (10 in number) and attitude (02 in number) excluding demographic data like name, age, sex, education status and place. Cronbach's alpha value for all questions is 0.7.

All Gynaecologists who were available on the day of study participated in the study. Questionnaire was distributed to all participants and they were given sufficient time to complete the questionnaire and was collected on the same day. Statistical analysis: Data was entered into a standard Microsoft excel 2007 sheet. The collected data was subjected to statistical analysis using SPSS version 9. The Chi-square test was done to analyze the data. P value of 0.05 was considered as significant for all statistical analysis.

RESULTS

A total of 56 Gynaecologists filled up the questionnaire, among them 53 subjects were female and 3 subjects were male. Age range of the subjects was from 30 years to 59 years with Mean age being 38.28 ±9.66. About 75% of Gynaecologists strongly agreed that oral health is an important component of a pregnant women's general health. About 75% of them agreed that pregnant women should go for dental check up during their pregnancy

The present study showed that 53.5% of the study subjects agreed that 2nd trimester is the best time for dental treatment of pregnant women. Most of the participants (42.8%) were not aware of transmission of cariogenic bacteria from mother to child. Most of the participants (39.2%) were not sure that hormonal changes during pregnancy will affect the oral health. Only 5.3% of study subjects strongly agreed that periodontal infection in pregnant women has the potential to affect the pregnancy outcomes whereas 41% of them were not sure. 57.1% of them knew that gestational diabetes has effect on oral health. About 48.2% of the participants knew that usage of Tetracycline and Chloramphenicol during pregnancy has adverse effect on child's teeth, but still some of them (17.8%) were not sure about the usage of these drugs during pregnancy (Table 2). Over all attitudes of the study subjects was positive towards oral health care in pregnancy.

DISCUSSION

The present study showed that Gynaecologists were knowledgeable about some aspects of oral health during pregnancy like best time for dental checkup for emergency dental treatment of pregnant women, effect of gestational diabetes on oral health and adverse effects of using Tetracycline and Chloramphenicol during pregnancy. But they were uncertain regarding transmission of bacteria from mother to child, effect of periodontal infection on pregnancy outcomes and effect of hormonal changes during pregnancy on oral health.

Previous literature showing that there is an association between periodontal infection and preterm, low birth weight.[9-11] Pre term (< 2500 grams or 5.5 pounds) is a condition where death and disability in infants is a leading cause.[13]

Present study showed that knowledge about the association between periodontal infection

Table 1: Distribution of participants according to age, gender and education.

Age group (years)	Number of participants
30-39	16(28.57%)
40-49	28(50%)
50-59	12(21.4%)
Total	56(100%)
Gender	
Male	3(5.3%)
Female	53(94.6%)
Total	56(100%)
Education	
DGO	32(57.1%)
MD	24(42.8%)
Total	56(100%)

and adverse pregnancy out comes was less (41%) when compare to a study done by Rekha et al in 2009 in Mangalore city (60%).[6] It can be due to unfamiliarity with oral health issues. Recent study [14]showed that many young children acquire caries causing bacteria from their mothers. The present study participants (42.8%) were not aware of the transmission of cariogenic bacteria from mother to their children as they may not receive recent literature from continuing education programs.

The present study subjects (75%) positively responded that pregnant women should consult dentist for oral health checkup which is very high response when compare to a study done by Rebecca et. Al[8] on Obstetricians in 2007 (49%). It can be due to the awareness about oral diseases in pregnant women through continuous education programs.

About 78.5% of the participants were aware that usage of tetracycline and chloramphenicol during pregnancy will affect their child's teeth as they might be studied during their training period as tetracycline has chelating property and calcium - tetracycline chelate gets deposited in developing teeth and bones of new born. It will cause yellowish brown discoloration, ill formed teeth and those teeth will more susceptible to caries.

The present study subjects (92.7%) thought that 2nd trimester is best time for emergency dental treatments or any surgical procedures as they might have knew the reasons as at this stage in gestation, the threat for teratogenicity has passed, nausea and vomiting are less common and the uterus is not large enough to cause discomfort. Another reason for completing treatment is that some pregnant women may require general anesthesia with intubation at delivery. Because pre-anesthesia evaluation usually occurs at the time of labor, problems such as loose teeth and temporary restorations should be remedied prior to the estimated date of delivery.[32]

About 39.2% of the present study subjects were not aware of the effect of hormonal changes during pregnancy on oral health. It can be attributed to lack of training programs on oral health for them. The study subjects have positive attitude towards oral health care in pregnant women. They thought that educating the pregnant women regarding maintenance of oral health is important (64.1%).

About 92.8% of them thought that Gynaecologists has an important role in oral health promotion as women will consult Gynaecologist first than dentist and it's their duty to educate the patient regarding good personal hygiene including oral health. There is a need to conduct studies on large sample of Gynaecologists to know their knowledge as this study was conducted on convenient sample with less subjects.

RECOMMENDATIONS

Even though Gynaecologists have knowledge about oral health, there is need for conducting continuing education programs on oral health of pregnant women to keep updating of their knowledge. There is a need for good communication between dental care providers and Gynaecologists to promote the oral health of pregnant women and their children.

CONCLUSION

Pregnancy is a unique time in a woman's life and is characterized by complex physiological changes. These changes can adversely affect oral health during pregnancy. Pregnancy is an opportune time to educate women about preventing dental caries in young children, one of the most common childhood problems.

Findings of the current study revealed that Gynaecologists have knowledge towards oral health care in pregnant women and participants have positive attitude towards oral health care in pregnant women which is useful for their patients to prevent dental diseases.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

REFERENCES

1. Tilakaratne A, Soory M, Ranasinghe AW, Corea SM, Ekanayake SL, de Silva M. Periodontal disease status during pregnancy and 3 months post-partum, in a rural population of Sri-Lankan women. J Clin Periodontol. 2000 0ct;27(10):787- 792.

2. Laine MA. Effect of pregnancy on periodontal and dental health. Acta Odontol Scand. 2002; 60:257-264.

3. Saddki N, Bachok N, Hussain NH, Zainudin SL, Sosroseno W. The association between maternal periodontitis and low birth weight infants among Malay women. Community Dent Oral Epidemiol. 2008;36:296-304.

4. Pirie M, Cooke I, Linden G, Irwin C. Review on dental manifestations of pregnancy. Obstet Gynaecol. 2007 Jan; 9:21-26.

5. Pitiphat W, Joshipura KJ, Gillman MW, Williams PL, Douglass CW, Rich-Edwards JW. Maternal periodontitis and adverse pregnancy outcomes. Community Dent Oral Epidemiol. 2008,36:3-11.

6. Shenoy RP, Nayak DG, Sequeria PS. Periodontal disease as a risk factor in pre-term low birth weight - An assessment of gynecologists' knowledge: A pilot study. Indian J Dent Res. 2009; 20(1): 13-16.

7. 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 Hyg. 2008; 6(3): 214-220.

8. Wilder R, Robinson C, Jared HL, Lieff S, Boggess K. Obstetricians' Knowledge and Practice Behaviors Concerning Periodontal Health and Preterm Delivery and Low Birth Weight. J Dent Hyg. 2007 Oct; 4(1): 80-81.

9. Jeffcoat MK, Geurs NC, Reddy MS, Cliver SP, Goldenberg RL, Hauth JC. Periodontal infection and preterm birth: results of a prospective study. J Am Dent Assoc. 2001; 132(7):875-880.

10. Lopez NJ, Smith PC, Gutierrez J. Periodontal therapy may reduce the risk of preterm low birth weight in women with periodontal disease: a randomized controlled trial. J Periodontal. 2002; 73(8):911-924.

11. Offenbacher S, Lieff S, Boggess KA, Murtha AP, Madianos PN, Champagne CM. Maternal Periodontitis and Prematurity. Part I: Obstetric Outcome of Prematurity and Growth Restriction. Ann Periodontal. 2001 Dec; 6(1): 164—174.

12. Moreu G, Tellez L, Gonzalez-Jaranay M. Relationship between maternal periodontal disease and lowbirth- weight pre-term infants. J Clin Periodontal. 2005 Jun;32(6):622-627.

13. Mitchell SC, Ruby JD, Moser S, Momeni S, Smith A, Osgood R, et al. Maternal transmission of mutans Streptococci in severe-early childhood caries. PediatrDent.2009; 31(3): 193-220.

14. Kumar J, Samslon R, Burakoff R. Oral Health Care during Pregnancy and Early Childhood Practice Guidelines, New York State Department of Health. August 2006.