International Journal of Multidisciplinary Research and Development
Online ISSN: 2349-4182, Print ISSN: 2349-5979; Impact Factor: RJIF 5.72
Received: 16-01-2020; Accepted: 17-02-2020; Published: 13-03-2020
www.allsubjectjournal.com
Volume 7; Issue 3; 2020; Page No. 80-82

A study to assess the knowlwdge on oral health among pregnant women

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Abstract
Pregnancy is a special state for women, which associated with a myriad of emotional and physiological changes in different parts of the body including oral cavity and dental health. These changes predispose women to dental caries and gingivitis. The objectives of the study were to assess the level of knowledge on oral health among pregnant women and to associate the levels of knowledge on oral health among pregnant women with the selected demographic variables. A quantitative study was chosen to assess the level of knowledge on oral health among pregnant women. 100 mothers who met the inclusion criteria were selected by using non probability convenience sampling technique. The demographic variables were collected with self-administered questionnaire method and the level of knowledge on oral health was assessed by structured questionnaire. The result shows that out of 100 samples 10% members had inadequate knowledge, 56% members had moderate knowledge and 34% had adequate knowledge and there is no significant difference in level of knowledge with the selected demographical variables. The results of the study clearly reflected that the awareness levels among the pregnant women regarding this association were low. Hence, more collective efforts are required from dental and medical professionals to improve the oral and periodontal health outcomes during pregnancy.

Keywords: pregnancy, antenatal mothers, oral health

Introduction
Pregnancy is a special state for women, which is associated with a myriad of emotional and physiological changes in different parts of body including oral cavity and dental health. These changes predispose women to dental caries and gingivitis. The storm of hormones which is induced during pregnancy causes changes in the mother's body and oral cavity is no exception. Pregnancy gingivitis is a well-recognized entity. The oral changes which are seen in pregnancy include gingivitis hyperplasia, pyogenic granuloma and salivary changes. Increased facial pigmentation is also seen. Elevated levels of the circulating oestrogen, which cause an increased capillary permeability, predispose the pregnant women to gingivitis and gingival hyperplasia. Pregnancy gingivitis usually affects the marginal and the interdental papilla and it is related to the pre-existing gingivitis. Good oral hygiene can help in preventing or reducing the severity of the hormone mediated inflammatory oral changes.

Pregnancy does not cause periodontal disease but it does worsen an existing condition. Pyogenic granulomas occur in about 1% to 5% of the pregnant women. Increased angiogenesis, which is caused by sex hormones, coupled with gingival irritation which is caused by local factors such as plaque, is believed to cause pyogenic granuloma. It can happen at any time during pregnancy but it is reported to be most common in the first pregnancies, during the first and the second trimesters and it mar regress after the child's birth. Although it is uncommon, it is known that the tooth mobility may increase during a late pregnancy.

It has been said that the mother "loses a tooth for every baby". There is no medical literature to support this statement. The loss of a tooth by pregnant women most likely reflects a continuation of her current state of dental health. It is possible that pregnancy gingivitis may sufficiently irritate the gums to make brushing and the routine dental care uncomfortable and this may hasten the tooth decay. This tooth decay does not occur in most of the patients.

The main salivary changes in pregnancy involve its flow, composition, pH and hormone levels. Cross sectional studies have shown a reduced, whole stimulated salivary flow rate in pregnant women, but longitudinal studies have shown that there was no change in the whole stimulated salivary flow rate. The changes in the composition of the saliva include a decrease in the sodium concentration and pH and an increase in the potassium, protein and the oestrogen levels.

Pregnancy and child birth are special event in women's life and indeed in lives of their families. Although pregnancy is not a disease, but a normal physiology process, it associated with certain risk to the health and survival both for the mother and the child she bares. Hence provision of information and adequate knowledge may help the mothers to adopt and maintain healthy practices and life styles which will helps the mother to bring forth a healthy baby.

Pregnancy needs special attention from the time of conception to the postnatal stage, Postnatal care is the greatest insurance policy a woman can invest in during her pregnancy. Process of promoting health maintenance, addressing physical and psychological changes, providing support for self-care and assessing the women to maintain a healthy lifestyle during pregnancy are important nursing action. Improved prenatal care has dramatically reduced in infant and maternal mortality. However, give the relationship between oral health and general health care should be a goal in its right for all individuals. It is intriguing to consider preconception, pregnancy or intra

partum treatment of oral health conditions as a mechanism to improve women's oral health.

Objectives

- To assess the level of knowledge on oral health among pregnant women.
- To associate the levels of knowledge among pregnant women with selected demographic variables.

Methods and Materials

A quantitative study was chosen to assess the level of knowledge on oral health among pregnant women. 100 mothers who met the inclusion criteria were selected by using non probability convenience sampling technique. The inclusion criteria were pregnant women attending hospitals for their routine checkup. The exclusion criteria were nonpregnant women and women who did not provide consent. The demographic variables were collected with self-administered questionnaire method and the level of knowledge on oral health was assessed by structured questionnaire. The data were analyzed by inferential statistics.

Results and Discussion

The present study reveals that out of 100 samples 31% belongs to the age group of 18-21, 52% belongs to Hindu religion, 31% had secondary education, 33% were unemployed, 77% reside in rural area and 76% belongs to joint family.

Table 1: Frequency and Distribution of level of knowledge on oral health among pregnant women

Level of Knowledge	Frequency	Percentage
Inadequate	10	10%
Moderate	56	56%
Adequate	34	34%

The present study reveals that out of 100 samples 10% mothers had inadequate knowledge, 56% mothers had moderate knowledge and 34% mothers had adequate knowledge.

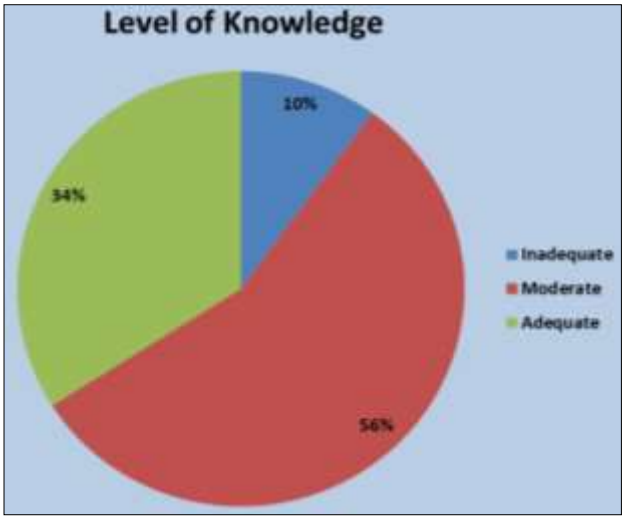

Fig 1: Frequency and Distribution of level of knowledge on oral health among pregnant women

Ramamurthy, Jaiganesh & Irfana, Fathima (2017) [11] conducted a study to assess the knowledge and awareness about periodontal oral health among pregnant women- A Questionnaire study. The study results reveal that knowledge and awareness regarding periodontal disease and its effect on the pregnancy and birth outcome is very limited. Knowledge and awareness about use of interdental aids, extra care during pregnancy and about premature labour and low birth babies are correlated with periodontal oral health. Several studies of similar designs have been conducted within the country and abroad. Among these studies conducted in various parts of India had similar conclusions that awareness regarding oral health was poor in pregnant females irrespective of their age or educational qualifications. In a study conducted in Poland, to assess the level of oral health knowledge in pregnant females, as high as 70% prevalence of gingivitis and periodontitis was found with low health awareness.

The present study reveals that there is a significant association in demographic variables such as, Education, Occupation and Residential status and the other are not significant.

Conclusion

In the view of oral health during pregnancy, an add-on to the awareness about health care and associated preventive measures, better positive attitudes can always be achieved at every step. Education on effective tooth brushing to prevent periodontal diseases and its impact on their newborns is needed in the current population, especially in rural areas. Apart from the benefit to the health of the women, mothers play a crucial role in transferring and demonstrating health habits to their children; therefore, pregnant women should be a target group for oral health education. The effect of dental diseases on their pregnancy outcomes and the oral health of their offspring should also be highlighted. The potential of poor oral hygiene during pregnancy should be understood so as to protect the oral health of the mother as well as of the unborn, with the purpose of being an effective supervisor of the child's oral health.

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