

PREVALENCE OF PERIODONTITIS IN PREGNANT WOMEN PRESENTING AT GENERAL OUT PATIENT CLINIC UNTH

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INTRODUCTION

Periodontitis is an inflammatory disease of the periodontium which is characterized by a progressive destruction of the tissues supporting the tooth. It is considered to be the advanced stage of periodontal disease; which refers to both gingivitis and Periodontitis. Its primary etiology is the gram-negative bacteria, which causes persistent inflammation and destruction of the supporting structures of the teeth, such as the periodontal ligament and alveolar bone, resulting in mobility and occasional teeth loss.[1,2]

A number of factors are involved in the occurrence of periodontitis, pregnancy being one of the modifiable aspects. A number of alterations in the oral cavity may become more prevalent during pregnancy. The gingiva is most commonly affected in pregnancy due to the increase in oestrogen level that is associated with pregnancy and this may lead to bleeding gums in pregnancy. Periodontal disease can be prevented as well as treated by controlling plaques through frequent flossing, brushing, scaling and polishing[3].

Although, oral health is important, many pregnant women presenting at unth have little or no knowledge about oral health, hence do not seek oral health care. This often results in poor oral hygiene and periodontal diseases, hence, the need for this study. This study aims to determine the prevalence of periodontitis among pregnant women presenting to the ante-natal clinic UNTH, Enugu state, Nigeria.

OBJECTIVES

1. To Determine the prevalence of periodontitis among pregnant women in UNTH.
2. To Determine the stage of periodontitis common in pregnant women at UNTH.
3. To Determine the knowledge of periodontitis among pregnant women in UNTH.
4. To Determine the association between pregnancy and periodontitis in UNTH.

METHODOLOGY

A quantitative cross sectional survey was conducted using a self-administered paper questionnaire to access the prevalence of periodontitis in pregnant women. The study was conducted among 150 pregnant women attending antenatal clinic which runs from Mondays to Fridays at the University of Nigeria Teaching Hospital, Ituku-ozalla, Enugu state, Nigeria. Ethical approval was obtained from the University of Nigeria Health research ethics committee (protocol number - 0144/12/2023). Informed consent was obtained from the respondents before commencement of the study, and they were duly informed that their participation was voluntary and the information collected was confidential.

Pregnant women attending the ante-natal clinic within the period of the study who gave their consent were included. However, those who refused to give consent were excluded within these age groups: from the study.

The questionnaire, consisting of 25 questions, was divided into five sections (A-E); A) Demographics, B) Health and pregnancy history, C) Oral health, D) Periodontitis and pregnancy, E) Feedback and suggestions.

RESULTS

100 pregnant women responded between January to April 2024 giving a percentage response of 66%. The respondents were divided into three age groups: 20-29, 30-39 and 40-49.

Among the 100 respondents, only very few (4%) had visited the dentist for oral care, most of the respondents never heard of periodontitis(60%), some of them knew about periodontitis(40%), and about half of those who knew about periodontitis (24%) knew about the potential link between periodontitis and pregnancy.

The histogram shows the different symptoms of periodontitis in respondents of different age groups. The percentages represent the number of respondents in each age group who experience these symptoms.

From the histogram, 79% of people experience bleeding gum in the age group of 20-29 years, while in the age group of 40-49 years, only 1% of respondents experience it.

Another symptom shown is gingiva swelling. In the age groups of 20-29 and 30-39 years, average number of the respondents (50% and 47% respectively) experience gingiva swelling, while in the age group of 40-49 years, 3% of people experience it.

Tooth mobility is experienced by 50% of persons in the age group of 20-29 years. While 20% of persons in age group of 40-49 years experience it. This shows that these symptoms are less common in pregnant women of older age groups. The prevalence of vomiting and irritation while brushing is also seen to be high (60%) in the age of 20-29 years compared to age group 40-49(1%). It is suspected that pregnant women of younger age groups have a hypersensitive gag because estrogen level peaks at this age (mid to late 20s) [4]. As a result of this symptom, most respondents make little or no effort at brushing or maintaining good oral hygiene during pregnancy. This predisposes them to other oral health conditions such as halitosis, and dental caries which is evidenced by toothache, as shown in the histogram.

Also, symptoms with the highest prevalence such as gingiva bleeding (79%) and gingiva swelling (50%) are symptoms of early stages of periodontal disease. Hence they are likely to resolve post- partum, when the levels of oestrogen decline, and respondents return to maintaining oral hygiene.

Visit to Dentist



Fig 1.1

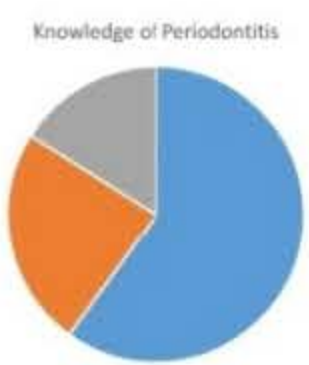


Fig 1.2

Visit the dentist regularly
Never visited a dentist
Visit the dentist to seek oral care

Never heard of Periodontitis
Heard of and know about potential link between periodontitis and pregnancy
Heard of but don't know about potential link between periodontitis and pregnancy

Symptoms of Periodontitis

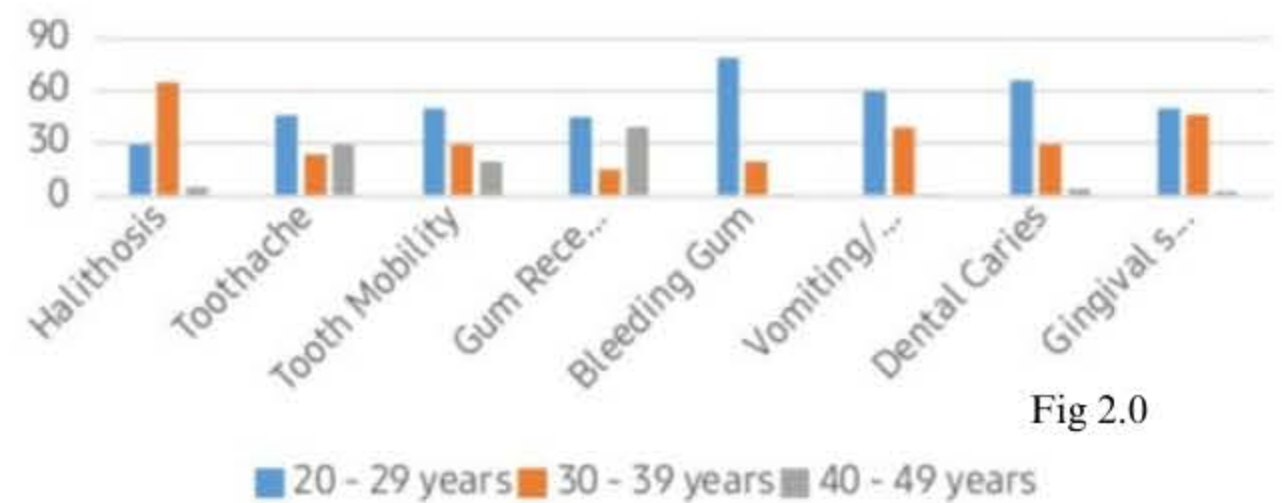


Fig 2.0

DISCUSSION

Previous studies have been conducted on the incidence of periodontitis in pregnant women, and oral awareness and practices of pregnant women attending antenatal clinics in south east. These studies attribute periodontitis during pregnancy to factors such as poor oral hygiene, malnutrition, poverty, ignorance and lack of education[5,6].

This study recognises that early stage of periodontitis is prevalent in pregnant women of younger ages(20-29) presenting at the ante-natal clinic, unth. However, only a few(40%) have good knowledge of periodontitis and it's potential link to pregnancy(24%).

CONCLUSION

There is need to address periodontitis among Pregnant women attending antenatal clinic. Also, preventive dental visit is essential to ensure optimum maintenance of oral health during pregnancy. Further empirical studies and intervention are encouraged to mitigate the risks associated with periodontitis and it's prevalence during pregnancy.

REFERENCES

1. De Vasconcellos Piscoya MDB, De Alencar Ximenes RA, Da Silva GM, Jamelli SR, Coutinho SB. Periodontitis-associated risk factors in pregnant women. Clinics [Internet]. 2012 Jan 1;67(1):27-33.
2. Listgarten MA. Pathogenesis of periodontitis. Journal of Clinical Periodontology [Internet]. 1986 May 1;13(5):418-25.
3. Vogt M, Sallum AW, Cecatti JG, Morais SS. Factors associated with the prevalence of periodontal disease in low-risk pregnant women. Reproductive Health [Internet]. 2012 Jan 24;9(1).
4. Lephart ED. A review of the role of estrogen in dermal aging and facial attractiveness in women. Journal of Cosmetic Dermatology [Internet]. 2018 Feb 13;17(3):282-8.
5. Onwuka CI, Udealor PC, Iloghalu EI, Onwuka CI, Ezugwu EC, Menuba IE. Oral Health Awareness and Practices among Pregnant Women Receiving Antenatal Care in a Low Resource Setting: A Cross-sectional Study of Antenatal Attendees in Enugu, Southeastern Nigeria. Journal of Clinical and Diagnostic Research [Internet]. 2021 Jan 1.
6. Chukwuemeka N, Ukegba C. Pregnancy and periodontal disease: 5 year clinical evaluation in Enugu, Nigeria. Orient Journal of Medicine (OJM) [Internet]. 2009 Jun 24;20(1-4).