

Awareness of Pregnancy-Related Oral Diseases in Women Attending Antenatal Clinics in a University Teaching Hospital in Nigeria

¹J.A. Obuna, ³H.A.A. Ugboma, ²H. Igbinedion, ¹B.N. Ejikeme,
¹U.M. Agwu and ⁴E.W. Ugboma

¹Department of Obstetrics and Gynaecology, ²Department of Maxilo-Facial Surgery,
Ebonyi State University Teaching Hospital, Abakaliki, Nigeria

³Department of Obstetrics and Gynaecology, ⁴Department of Radiology,
University of Port Harcourt, Choba, River State, Nigeria

Abstract: To determine the awareness of pregnancy-related oral diseases and the level of utilization of dental services by pregnant women attending antenatal clinic in a university teaching hospital. About 363 pregnant women who received antenatal care at Ebonyi State University Teaching Hospital were randomly selected and interviewed using a structured questionnaire over a period of 3 months (April-June, 2010). Of the 363 pregnant women interviewed, 297 (81.8%) were unaware of any pregnancy related oral diseases while 66 (18.2%) were aware of at least one pregnancy-related oral disease. Of the 45 (12.4%) women who have had oral disease, 18 (40%) were treated by dental surgeons, another 18 (40%) by general medical practitioners while 9 (20%) patronized patent medicine dealers. Respondents were aware of only three oral diseases: 54.5% were aware of Xerostomia, 28.8% knew of oral thrush while 16.7% were aware of periodontitis. The knowledge of pregnancy-related oral diseases and the utilization of dental services by parturients were poor. There is therefore the need for public health education on oral diseases in pregnancy, their complications and available dental services.

Key words: Awareness, pregnancy, oral disease, dental services, public health education

INTRODUCTION

It is well known that hormonal changes in pregnancy are associated with oral mucosal changes most of which are reversible clinically (Macleod and Soames, 1987; Scully and Cowson, 1998). Pregnancy epulis (vascular epulis) is the commonest form of oral/dental changes in pregnancy (Macleod and Soames, 1987). High level corticosteroids which is also responsible for telangiectasia on the skin may be responsible for this condition where the vessels of the mucosa are dilated (Ferguson *et al.*, 1978). Aphthous which worsens during luteal phase in non-pregnant women is ameliorated during pregnancy while the incidence of new cases is reduced. This may be attributed to high level of corticosteroids (Ferguson *et al.*, 1978).

Other changes include tooth surface loss usually related to hyperemesis gravidarum, increased teeth mobility caused by relaxin (relaxes the periodontal fibres which hold teeth in position seen more towards end of pregnancy).

Knowledge of these conditions by both patients and health workers are essential to enable them reduce or

manage complications arising from them till after delivery when conditions are likely to reverse (Macleod and Soames, 1987). Patients should be aware of the transient nature of these problems.

Awareness of oral disease during pregnancy by pregnant mothers and how it is managed will help them seek proper medical attention and avoid patronizing quacks. This study was embarked upon to assess the awareness of oral disease in pregnancy among expecting mothers in Abakaliki. It also assessed the utilization of dental services among them. No such study has been carried out in this environment.

MATERIALS AND METHODS

Ebonyi State created in 1996 from former Enugu and Abia States has 13 LGAs; one urban, one semi-urban, rest rural. Ebonyi State has a population of about 4.3 million and a land mass of 5,932 km. It shares boundaries with Enugu in the West; Cross-River States in the East; Abia in South-West and Benue in the North. About 75% of the populace dwell in rural areas. The major occupation is farming.

Ebonyi State University Teaching Hospital (EBSUTH) is located in Abakaliki, the state capital. It serves as a referral centre to all health facilities in the state and its environs. The study was carried out in conjunction with the dental unit of EBSUTH. The dental unit is regularly invited to give health talks to Antenatal Care (ANC) attendees in the hospital. The dental unit chose to spend the 2nd quarter of 2010 to educate the women on oral disease in Pregnancy.

Prior to the commencement of each of the health education which was done every Wednesday (booking day) to new enrollees of ANC, a well-structured questionnaire was randomly served to them after clearance from Research and Ethics Committee of the hospital. The questionnaire was duly explained to them and they were informed to feel free to opt out at any stage of the study. The participants who could not read or write were assisted by residents doctors. The study lasted for 3 months (April-June, 2010). About 500 questionnaires were served to participants but 363 were properly filled.

RESULTS AND DISCUSSION

Of the 363 participants who filled their questionnaires properly, 297 (81.8%) were unaware of any pregnancy related oral diseases. About 66 (18.2%) were aware of at least one pregnancy-related oral disease. The poor knowledge cuts across all age groups, parity and social class. Participants were aware of only three oral/dental diseases. About 54.5% were aware of Xerostomia, 28.8% were aware of oral thrush while 16.7% were aware of periodontitis.

Of the 45 women who have had oral disease in the past only 18 (40%) were treated by dental surgeons, another 18 (40%) were treated by general medical practitioners while 9 (20%) visited patent medicine dealers. All the pregnant mothers had obstetric sonography for fetal monitoring. Only 5 had dental X-ray for periodontitis (Table 1-5).

The awareness of oral/dental diseases in pregnancy in this study was poor (18.2%). This compares with other studies (Annan and Nuamah, 2005; Wotman and Mandel, 1976). The poor knowledge cuts across all ages, parity and social class. Though the incidence of oral disease in this study was low (12.4%) only 40% of those who had suffered oral disease visited the dental clinic for treatment. This is also similar to other studies (Annan and Nuamah, 2005; Wotman and Mandel, 1976). This is not surprising because the awareness of oral diseases is low and the general health seeking behaviour of the people is poor.

Radiological services were utilized. Apart from the routinely done obstetric sonography using the 3.5 MHz

Table 1: Socio-demographic characteristics of participants

Age (years)	Number	Percentage
<16	0	0.0
16-20	10	2.8
21-25	72	19.8
26-30	153	42.1
31-35	81	22.3
36-40	38	10.5
>40	9	2.5
Total	363	100.0
Parity		
0	46	12.7
1-4	279	76.8
≥5	38	10.5
Total	363	100.0
Social class		
1	27	7.4
2	180	49.6
3	63	17.4
4	47	12.9
5	46	12.7
Total	363	100.0

Table 2: Level of awareness

Awareness	Number	Percentage
Yes	66	18.2
No	297	81.8
Total	363	100.0

Table 3: Degree of knowledge of oral disease

Oral disease	No. that know it	Percentage
Xerostoma	36	54.5
Periodontitis	11	16.7
Oral thrush	19	28.8
Others	0	0.0
Total	66	100.0

Table 4: Level of utilization of dental services by participants who suffered oral disease

Type of service	Number	Percentage
Dental service	18	40
General practitioners	18	40
Patent medicine dealers	9	20
Total	45	100

Table 5: Level of utilization of dental services by participants irrespective of dental health (ever visited dental services)

Clinic	Number	Percentage
Yes	37	10.2
No	326	89.8
Total	363	100.0

probe, some had dental X-rays done. Majority of the participants were aware of the dry mouth symptom but none was aware of the commonest oral disease in pregnancy (i.e., pregnancy epulis).

It is necessary to carry out another study that will involve a more detailed oral examination of the expectant mothers to ascertain oral diseases in pregnancy in the environment and to know whether pregnant epulis is really common in the environment. This study reveals the need for education of the public on oral/dental health.

Oral health should also be included in the curriculum of medical students, residency program especially in

Obstetrics and Gynaecology as well as nursing education. This will enable them counsel clients and refer properly to dental unit when needed.

CONCLUSION

Knowledge of oral health and utilization of dental services are poor in the environment. There is urgent need for massive oral/dental health education of the populace.

REFERENCES

- Amman, B.D.R.T. and K. Nuamah, 2005. Oral Pathologies seen in pregnant and non pregnant women. *Ghana Med. J.*, 39: 24-27.
- Ferguson, M.M., D. McKay Hart, R. Lindsay and K.W. Stephen, 1978. Progesterone therapy for menstrually related aphthae. *Int. J. Oral Surg.*, 7: 463-470.
- Macleod, R.I. and J.V. Soames, 1987. Epulides: A clinico-pathological study of a series of 200 consecutive lesions. *Br. Dent. J.*, 163: 51-53.
- Scully, C. and R.A. Cowson, 1998. *Medical Problems in Dentistry*. 4th Edn., Butterworth-Heinemann, Oxford, ISBN: 978-0723610564, Pages: 570.
- Wotman, S. and I.D. Mandel, 1976. The Salivary Secretion in Health and Disease. In: *Diseases of the Salivary Glands*, Rankow, R.M. and I.M. Polyes (Eds.). Saunders, Philadelphia, Pages: 379.