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# PERCEPTION OF PREGNANT WOMEN IN RELATION TO ORAL HEALTH AND DENTAL NEEDS

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**Abstract: Goal:** To know the sociodemographic conditions, evaluate the perception of pregnant women in relation to oral health, dental treatment needs and identify the factors that influence or interfere with access to dental treatment during pregnancy. **Methods:** Participated in the study 73 pregnant women assisted at HULW. A semi-structured questionnaire was applied on sociodemographic data, self-perception of oral conditions and needs for dental treatment, in addition to some questions from the OHIP-14 index. Data were compiled and presented considering relative and absolute values. **Results:** Of the total sample, 37% were between 26 and 30 Years old, had a stable relationship (46.6%), had completed high school (42.5%) and 50.7% survived on less than one minimum wage. As for the perception of the presence of changes in the mouth during pregnancy, 91.8% of the pregnant women did not notice any changes, although 97.3% stated that they needed dental treatment. However, 49 (67.1%) pregnant women did not seek a dentist during pregnancy, the main reasons reported were: they thought they had no need (41.1%), lack of money/time and/or desire (11%), fear (8.2%), no reason (5.5%) and going to the dentist before pregnancy (1.4%). Through the OHIP-14 items, a low impact of oral conditions on the quality of life of pregnant women was observed. **Conclusion:** Most of the interviewees do not have completed high school, have low family income. Most did not seek dental treatment during pregnancy and the main reason given was the lack of need. Oral conditions had a low impact on their quality of life.
**Keywords:** Pregnancy; Oral Health; Dentistry.

## INTRODUCTION

Pregnancy is a complex physiological period; it is It is fundamental that the woman has a comprehensive monitoring of her health for the perfect development of the maternal-fetal binomial. The perception of their real state of health enables the individual to take appropriate preventive measures or seek adequate assistance, when necessary. Oral health cannot be excluded from this context, hence the importance of self-perception of its demands, as well as the search for treatment. However, many factors still influence women's resistance and fear of seeking dental care during pregnancy.

Doubts about dental care during pregnancy may be related to insecurity in the indication of this practice and the low perception of needs, combined with lack of interest, complacency, forgetfulness, as well as resistance to dental treatment that some people have, especially during pregnancy. (ALBUQUERQUE et al., 2004).

Allied to this, popular myths tend to associate dental treatment during pregnancy as a harmful factor for the baby and the mother. Among the procedures that generate greater insecurity, the most cited are the use of anesthetics and radiographic examinations. Beliefs without proper scientific support contribute to the distancing of pregnant women from dental services (CODATO et al., 2008).

Thus, due to oral alterations typical of pregnancy, it is important to prenatal dental follow-up, which can detect oral problems early, in addition to guiding questions related to healthy eating habits and oral hygiene care (HALL, CHNG, 1892).

Prenatal care is directed at three work plans: screening of high-risk pregnant women, specific prophylactic actions for the pregnant woman and the fetus, and health education (GABARDO et al., 2013). It is therefore expected that within the scope of Dentistry the main health-related factors that may negatively interfere with the normal course of

pregnancy will be identified and that health education and specific prophylactic actions will be instituted.

Studies have shown that, among other factors, the lack of self-perception of health conditions is an important reason why a large part of the population does not seek health treatment, including dental treatment. In addition, self-assessment is related to physical, psychological, social and cultural factors, in addition to being directly proportional to the conditions of individuals, that is, the more unfavorable the circumstances, the less they can perceive themselves (SLADE, 1997).

Starting from the hypothesis that the pregnant woman is responsible not only for her own health, but also for the health of the future baby and the family, the study of self-perception of oral health can be an important parameter to improve the conditions of this population.

Thus, the objective of this study is to know the sociodemographic conditions, evaluate the perception of pregnant women in relation to oral health and the need for dental treatment, identifying the factors that influence or interfere with access to dental treatment during pregnancy.

## METHODOLOGY

This is an exploratory research, of a descriptive nature, with a quantitative approach, carried out with a sample consisting of 73 pregnant women assisted at Hospital Lauro Wanderley (HULW/UFPB), at the Women's Health Unit, chosen through a random sample.

Pregnant women over 18 Years of age, in any gestational period, who undergo prenatal care at the aforementioned Women's Health Unit and who agreed to participate in the research were included in the study.

Pregnant women under 18 Years of age, pregnant women who did not agree to participate in the research and who presented functional illiteracy were excluded from the study.

A semi-structured questionnaire with closed questions directed at pregnant women was applied. Of the 20 questions in the questionnaire, 13 were related to socioeconomic data, data about pregnancy (trimester of pregnancy, number of pregnancies). The other 7 questions were based on the Oral Health Impact Profile Index – 14 (OHIP-14), with a more specific objective of assessing self-perception.

The OHIP-14 index questions analyze the influence of individuals' perception of the impact of oral conditions on aspects of health status and quality of life, encompassing the following dimensions:

a) functional limitation (taste worsens – question 1)
b) physical pain (discomfort when eating food – question 2)
c) psychological discomfort (concern about problems with teeth/mouth – question 3)
d) physical disability (impaired diet – question 4)
e) psychological disability (shame – question 5)
f) social disability (difficulty performing daily activities – question 6)
g) handicap (unsatisfactory life – question 7) (SLADE et al., 2005).

To build the database, Microsoft Excel 2016® spreadsheet *software was used.* The software used to obtain the statistical calculations was the statistical program SPSS (Statistical Package for Social Sciences) in version 20, then the data were compiled and presented considering relative and absolute values.

As this is a study involving human beings, the research project was submitted for approval to the Research Ethics Committee of Hospital

Lauro Wanderley, through Plataforma Brasil (CAAE: 99174818.6.0000.5183) and duly approved on 10/11/2018. All participants signed the Free and Informed Consent Form.

## RESULTS

Most women in this study (37%) were between 26 and 30 Years old. From an educational and socioeconomic point of view, the sample was characterized as an adult population, in a stable relationship (46.6%), with complete secondary education (42.5%), low purchasing power (50.7%) who survive on less than one minimum wage, and their main occupation (49.3%) is domestic activities. Furthermore, 46.6% of the pregnant women were in the second trimester of pregnancy and 50.7% (n=73) were multiparous (Table 1).

| | f | % |
|---|---|---|
| **AGE GROUP** | | |
| 18 to 20 Years | 8 | 11 |
| 21 to 25 Years | 26 | 35.5 |
| 26 to 30 Years | 27 | 37 |
| 31 to 35 Years | 7 | 9.5 |
| More than 35 Years | 5 | 6.8 |
| **MARITAL STATUS** | | |
| Married | 24 | 32.9 |
| Single | 14 | 19.2 |
| Divorced | 0 | 0 |
| Widow | 1 | 1.4 |
| Stable union | 34 | 46.6 |
| **EDUCATION** | | |
| Elementary Incomplete | 5 | 6.8 |
| Elementary Complete | 10 | 13.7 |
| Medium Incomplete | 24 | 32.9 |
| High School Complete | 31 | 42.5 |
| Incomplete higher | 1 | 1.4 |
| Graduated | two | 2.7 |
| **INCOME** | | |
| No fixed income | 6 | 8.2 |
| Less than minimum wage | 37 | 50.7 |
| 1 To 2 minimum wages | 27 | 37 |
| Greater than 2 minimum wages | 3 | 4.1 |
| **PROFESSION** | | |
| From home | 36 | 49.3 |
| Merchant | 11 | 15.1 |
| Student | 5 | 6.8 |
| Unemployed | 4 | 5.5 |
| Others | 17 | 23.3 |
| **PREGNANCY PERIOD** | | |
| First trimester | 13 | 17.8 |
| Second trimester | 34 | 46.6 |
| Third quarter | 26 | 35.6 |
| **QUANTITY OF PREGNANCY** | | |
| First pregnancy | 33 | 45.2 |
| 2 To 3 pregnancies | 37 | 50.7 |
| 4 Pregnancies or more | 3 | 4.1 |
| TOTAL | 73 | 100 |

Table 1- Distribution of sociodemographic variables of pregnant women attended at a university hospital and variables related to number of pregnancies and gestational period.

Source: Direct Research.

Of the total sample, only 32.9% sought a dentist during pregnancy, although 97.3% stated that they needed dental treatment. Regarding the perception of the presence of alterations in the mouth during pregnancy, 91.8% of the pregnant women did not perceive any alteration, in addition, 35.6% considered tooth loss during pregnancy to be normal (Table 2).

| | f | % |
|---|---|---|
| **SEEKING THE DENTIST DURING PREGNANCY** | | |
| Yes | 24 | 32.9 |
| Not | 49 | 67.1 |
| **MOUTH ALTERATIONS** | | |
| Yes | 6 | 8.2 |
| Not | 67 | 91.8 |
| **IS TOOTH LOSS NORMAL IN PREGNANCY?** | | |
| Yes | 26 | 35.6 |
| Not | 47 | 64.4 |
| **NEED FOR DENTAL TREATMENT** | | |
| Yes | 71 | 97.3 |
| Not | two | 2.7 |
| **TOTAL** | 73 | 100 |

Table 2- Variables related to the presence of oral alterations, loss of teeth, need and demand of pregnant women for dental treatment during the gestational period.

Source: Direct Research.

When asked about the main reasons why they did not seek dental treatment, 41.1% said they did not need treatment, fear was cited by 8.2%, in addition, 1.4% had gone to the dentist before pregnancy, some claimed lack of money and/or time (1.1%) and others (5.5%) for no specific reason (Table 3).

| | f | % |
|---|---|---|
| Fear | 6 | 8.2 |
| No need for treatment | 30 | 41.1 |
| Going to the dentist before pregnancy | 1 | 1.4 |
| Lack of money/will and/or time | 8 | 11 |
| Without a reason | 4 | 5.5 |
| **TOTAL** | 49 | 67.1 |

Table 3 - Reasons why pregnant women did not seek dental care during pregnancy.

Source: Direct Research.

Table 4 shows the data from the OHIP-14 regarding the dimensions: functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and disadvantage. It is noted that in all items surveyed there was no impact of oral health on the quality of life of patients. Even though some people responded that they needed dental treatment, the majority of responses in the OHIP-14 index were in the sense of no impact. Even so, most of the time, the impact is revealed in items that contemplate psychological discomfort or physical incapacity. Only 9.6% feel that the taste of food has deteriorated ("Almost always" = 8.2% and "Sometimes" = 1.4%). No patient felt that her life, in general, was made worse because of problems with her teeth ("Almost always" and "Sometimes"). The item that had the most impact on quality of life was the change in the taste of food, even so, 42.5% declared that they never felt the change.

| In the last six months | Often | | Sometimes | | Few times | | Rarely | | Never | |
|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % |
| 1-Have you felt that the taste of food has deteriorated? | 6 | 8.2 | 1 | 1.4 | 19 | 26 | 16 | 21.9 | 31 | 42.5 |
| 2-Have you felt uncomfortable eating any food? | 5 | 6.8 | 4 | 5.5 | 19 | 26 | 13 | 17.8 | 32 | 43.8 |
| 3-Were you worried because of problems with your teeth/mouth? | 1 | 1.4 | 0 | 0 | 4 | 5.5 | 7 | 9.6 | 61 | 83.6 |
| 4-Do you feel that your diet has been impaired? | 0 | 0 | 1 | 1.4 | 3 | 4.1 | 7 | 9.6 | 62 | 84.9 |
| 5-Have you ever felt embarrassed because of problems with your teeth/mouth? | 2 | 2.7 | 3 | 4.1 | 1 | 1.4 | 3 | 4.1 | 64 | 87.7 |
| 6-Have you had difficulty carrying out your daily activities because of problems with your teeth/mouth? | 0 | 0 | 1 | 1.4 | 0 | 0 | 1 | 1.4 | 71 | 97.3 |
| 7-Have you felt that your life, in general, has been made worse because of problems with your teeth/mouth? | 0 | 0 | 0 | 0 | 2 | 2.7 | 2 | 2.7 | 69 | 94.6 |

Table 4- Oral Health Impact Profile Index (OHIP-14) questions and frequency distribution of answers in percentage.

Source: Direct research.

## DISCUSSION

The "Hospital Universitário Lauro Wanderley", in the city of João Pessoa/PB, is a reference hospital in the state of Paraíba/ Brazil in the care of high-risk pregnant women. In order to better understand the sample, some personal, socioeconomic and cultural characteristics were analyzed. In the present study, Table 1 reveals that the sample consisted of 73 pregnant women in different gestational periods - 46.6% in the second trimester, a picture similar to that presented by VILELLA et al (2016). As for the number of pregnancies, 50.7% were multi-gestations, similar to the study sample by CABRAL et al, 2001. The predominant design of the population was young and adult, most aged between 26 and 30 Years (37%). followed by women between 21 and 25 Years old (35.5%).

Considering the educational and economic point of view, 31 (42.5%) have completed high school and 37 (50.7%) have an income below the minimum wage. As it is a public hospital that receives patients both from the capital and from various underprivileged parts of the state and regions of the northeast, this profile is justified. In research comparing socioeconomic status with oral care, the sample outlined had similar characteristics to that of VILELLA et al. (2016), as 56% of the pregnant women belonged to socioeconomic class C and completed high school (60%).

Regarding profession, 49.3% of the interviewees had domestic chores as their main occupation, which contributes to the low family income. This result corroborates the findings of research conducted in 2013 by CABRAL et al., as 46.3% of pregnant women also reported being housewives.

When asked about seeking dental care during the gestational period (Table 2), 67.1% of the women answered that they did not seek dental care, similar results were found in the literature by MAEDA et al. (2001), SANTOS-PINTO et al. (2001) and SCAVUZZI et al. (2008). Despite the omission of seeking oral dental care, 97.3% of the sample were aware that they needed dental treatment. This can be explained by the fact that many pregnant women only seek dental care when they feel pain, have any infection and or need restorative treatment (MENINO et al., 1995, BASTIANI et al., 2010).

Of the total sample studied, 35.5% believe that it is normal to lose teeth during pregnancy, as they understand that there is a loss of calcium during this period. ARRAIS et al., (2017) agree that this shows a gap in the scientific knowledge of these women, associated with myths and popular beliefs that are still very present during the gestational period.

Table 3 presents the main reasons reported by the interviewees for not seeking dental care, 41.1% of them reported that they thought they did not need treatment, which characterizes an incongruity in relation to previous information and, perhaps, uncertainty in the perception of your actual state of health. Similar results were found by SCAVUZZI et al. (2008), as the main justification for not seeking dental treatment during pregnancy was the lack of perceived need. LIMA et al., (2016) also show that the most frequent oral changes during pregnancy are: caries and periodontal diseases, and most of the interviewees did not notice these changes.

In the present study, the interviewees also claimed that they did not seek dental care due to lack of money/willingness and/ or time (11%), fear (8.2%), for no apparent reason (5.5%) and going to the dentist before of pregnancy (1.4%). Another justification for this omission would be that, despite the expansion of dental services in the public sector, there are still limitations to access in several localities in the country.

SOARES (2012) argues that public policies that emphasize the expansion of actions and services with a comprehensive approach to pregnant women must have priority in dental care programs. The author agrees that the main reasons for pregnant women's resistance to seeking dental treatment in the public sector are due, firstly, to the delay in getting care at health centers and, secondly, because they think that pregnant women cannot undergo procedures. Given this situation, it is essential for dentists to participate together with a multidisciplinary team in expanding dental prenatal care in basic health units, in order to motivate and guide pregnant women regarding their oral health (CABRAL et al.., 2013).

Self-perception is an important indicator of health. A 2001 study by SILVA and FERNANDES shows that the self-perception of pregnant women in relation to oral health may differ from the clinical results obtained through examinations performed by professionals. In the on-screen survey, when analyzing the OHIP-14 questions that refer to the perception of various situations related to oral health, the most frequent answer was "never" for all questions, which demonstrates a low impact on the perception of pregnant women regarding their own oral health. These findings corroborate the 2002 study by BIAZEVIC et al., who report that even in unfavorable oral clinical conditions, not all individuals are able to perceive their real oral health condition.

Table 4 shows the frequency distributions of responses, according to each OHIP-14 item. The item that represented the greatest impact on quality of life was the change in the taste of food (42.5%) referring to functional limitation, however in a survey carried out in 2016, the issues of pain and discomfort with eating had a greater impact, as demonstrated by LIMA and collabs. (2016). In a study of 259 pregnant women in rural India, ACHARYA et al. (2009) state that the most frequent impact was physical pain and functional limitation, similar to the present research in relation to the dimension of functional limitation.

Another issue in this investigation refers to psychological discomfort or psychological disability, which most often reflect impact on the quality of life of pregnant women, corroborating the 2009 study by MISRACHI et al. The items with the highest frequency of responses that did not detect impacts were related to social disability and disadvantage, respectively, observed in questions 6 and 7. Thus, it is possible that these results, which had a low impact on quality of life, may have led to the pregnant women are more concerned with problems such as nausea and vomiting and not with aspects related to their oral health.

Some limitations of this study must be considered when interpreting its results, since the data were based on the pregnant women's reports. Even so, this investigation is justified, since it is important to know socioeconomic and cultural conditions and the self- perception of oral health conditions, as these are aspects that can directly reflect on the quality of life of pregnant women.

According to the results obtained and analyzes carried out in this study, it is concluded that the majority of the interviewees do not have completed high school, have low family income, have a low perception of their oral conditions, on the other hand, report the need for dental treatment during pregnancy. Most did not seek dental treatment during pregnancy and the main reason given was that they thought they did not need it. This way, we can direct public policies with an emphasis on the expansion of dental prenatal care, reflecting the need for educational and preventive programs in order to bring lasting benefits to pregnant women and their babies.

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