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KNOWLEDGE AND ATTITUDES OF OBSTETRICIANS REGARDING ORAL HEALTH DURING PREGNANCY IN A CITY IN THE SOUTH OF MINAS GERAIS

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Abstract: Introduction: The gestational period is characterized by hormonal changes that promote dental changes. Prenatal follow-up is relevant in tracking dental diseases, however there is a very low number of referrals for dental evaluation during pregnancy. **Objective:** To analyze the knowledge of obstetricians regarding oral health during pregnancy in a city in the south of Minas Gerais. **Methods:** Cross-sectional, analytical research, with a sample of 22 obstetricians. A sample characterization questionnaire was applied, addressing gender, age, training time and performance of these professionals. Regarding the topic, there were specific questions about dental issues during pregnancy. Data were analyzed using the Chi - square test. **Results:** The mean age of the participants was 50.09 years (SD: 11.45), the length of obstetric training was 23.63 years (SD: 11.85) and the division by sex revealed equality between them. About the activities carried out, 57% declared private, private and public prenatal care. With regard to dental guidance during medical residency, 72.72% of participants said they did not receive it, however 54.54% stated that they referred pregnant women for dental evaluation. Addressing specific issues of obstetric dentistry, 77.27% declared that there was no oral procedure contraindicated during pregnancy, the same percentage that associated dental pathologies with fetal complications. All participants reported greater susceptibility to gingivitis during pregnancy and 68.18% declared never having taken fluoride supplementation. **Conclusion:** The teaching of dental complications during pregnancy during medical residency in gynecology and obstetrics is a current need. The knowledge of the professionals approached was superior to that reported in the literature.

Keywords: Pregnant women; Knowledge; Doctors; Dentistry.

INTRODUCTION

The gestational period is characterized by hormonal and psychological changes that promote physical and lifestyle changes.[1] Thus, the pregnant woman needs comprehensive care performed in a multidisciplinary way, providing security regarding the quality of the health service provided. [1,2] Among such services, dental care is necessary due to the emergence of diseases with a higher incidence in pregnant patients, such as hypertension and diabetes, however, its use is restricted, in most cases, to correcting events acute, not providing a longitudinal and preventive follow-up.[3.4]

Dental follow-up must be offered to all pregnant women as a preventive and curative measure for diseases not diagnosed before the beginning of pregnancy, since hormonal changes influence changes in oral balance, favoring the appearance of caries and periodontal diseases.[3] The benefits of prenatal dental care extend to reducing the incidence of premature births and low birth weight, showing outcomes that go beyond oral care.[4]

During pregnancy, not infrequently, chronic diseases are diagnosed, such as diabetes mellitus and systemic arterial hypertension.[5] As a consequence, there are changes in lifestyle and health promotion through post-pregnancy follow-ups for these women, and the same must be applied to oral health, since closer follow-up of the pregnant woman with health professionals that leads to greater concern for these women with their health.[1,4] However, referral for dental evaluation is infrequent, both in private prenatal care and in those linked to the Unified Health System (SUS).[3.4]

The obstetrician, due to the longitudinal follow-up of these pregnant women, is a fundamental element for the promotion of oral health, since many women are afraid of having dental procedures during

pregnancy.[3,4,6] It is observed that dental referrals by obstetricians are performed, in most cases, only to correct acute events, such as the need for tooth extraction or emergency caries treatment[6] Thus, it is evident that health promotion for pregnant women loses its multidisciplinary character due to the low level of medical guidance, whether due to the restricted knowledge of these professionals regarding the pregnant woman's dental needs, or due to the lack of guidance to patients [4.6]

Thus, the present study aimed to analyze the knowledge of obstetricians regarding oral health during pregnancy in a city in the south of Minas Gerais.

METHODS

CHARACTERIZATION OF THE SEARCH LOCATION

The city of Itajubá is located in the south of the state of Minas Gerais, with a population of 90,658 inhabitants and a Human Development Index (HDI) of 0.787.[7]

ETHICAL CONSIDERATIONS

It is worth noting that the questionnaires were only applied after the physicians had accepted to participate in the research by signing the informed consent form. This work was approved by the Ethics and Research Committee of the ''Faculdade de Medicina de Itajubá" (FMIt) with opinion: 4,730,026.

SAMPLING

Considering a population of 25 Gynecologists and Obstetricians (GO) who met the inclusion criteria, using a confidence level of 99% and a sample error margin of 10%, it resulted in a sampling of 22 professionals.

PROJECT DESIGN AND ANALYZED POPULATION

This is a cross-sectional, observational, analytical study with a sample of 22 gynecologists and obstetricians who work in the city of Itajubá, Minas Gerais. As a criterion for inclusion of professionals, performance in the researched municipality was used as a parameter, being considered for their inclusion in the research those who: Have offices, and/or perform shifts in maternity wards, and/or perform complementary exams and/or work in Basic Health Units, always considering the municipality of Itajubá as the location of such activities.

DATA COLLECTION METHOD

A structured questionnaire was applied between the months of May and June 2021, addressing the knowledge and attitudes of these physicians in relation to the oral health of pregnant women. It must be noted that due to the COVID-19 pandemic, data collection was subject to relative difficulty in accessing professionals. Thus, the approach to them was carried out digitally through Google Forms®, with access made possible through a link previously forwarded by WhatsApp®. Access to the questions was only released after reading and agreeing to the terms of the Free and Informed Consent Form (TCLE). The researched questions included the characterization of the studied population as:

1- Gender;

2- Age;

3- Training time;

4- Private prenatal care and/or the Unified Health System (SUS).

With regard to specific questions about dental demands:

5 - Did you receive information about oral health in the medical residency course?

6 - Do you guide the pregnant woman to a dental appointment?

7 - Do you guide pregnant women regarding dietary control regarding sucrose consumption?

8 - What dental procedures would be contraindicated during pregnancy?

9 - What oral alterations are associated with pregnancy?

10 - Are the oral conditions of the pregnant woman related to premature birth and low weight of the baby?

11- Do you prescribe fluoride supplements to pregnant women?

STATISTICAL ANALYSIS:

Statistical analysis of the results was performed with the chi -square test, using Yates' correction when necessary. A result was considered statistically significant when the p value was less than or equal to 0.05. The program used was BioEstat 5.3.

RESULTS

22 gynecologists and obstetricians were approached, being equally divided between male and female. The mean age of the participants was 50.09 years (SD: 11.45), and the career time in the field of obstetrics was 23.63 years with a standard deviation of 11.85.

Regarding knowledge during the medical residency in gynecology and obstetrics about the need for dental care, 72.72% of the participants stated that they did not receive any instruction during their training (p=0.0550). Regarding attitudes, 54.54% declared referring pregnant women for dental evaluation, while 22.73% declared eventual referral and also 22.73% declared not carrying out referral (p=0.1078). With regard to guidelines on dietary control of sucrose consumption by pregnant women, 81.82% of physicians stated that they made such recommendations (p=0.0056).

Figure 1 shows the performance of prenatal care by the physicians approached, noting the predominance of private prenatal care, through health insurance plans and through the Unified Health System (SUS) (p=0.0112).

Table 1 presents the physicians ' answers regarding obstetric dentistry questions.

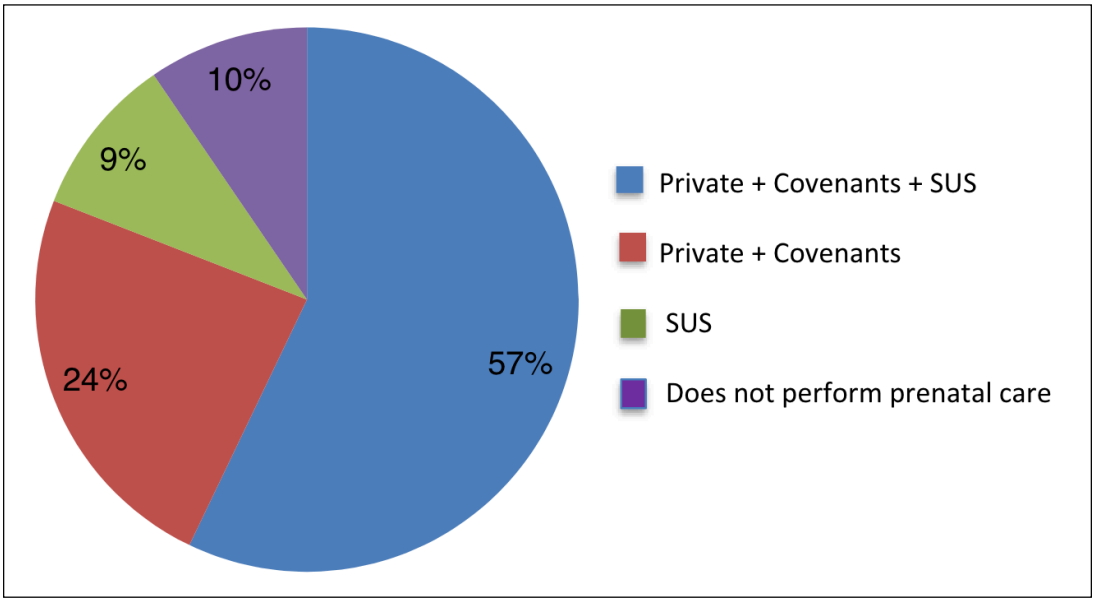

Figure 1. Performing prenatal care by the physicians approached.

Questions	No	BR	p value
Which dental procedures are contraindicated?			<0.0001
None	17	77.27	
X-ray	3	13.63	
Anesthesia	two	9.10	
What oral changes are associated with pregnancy?			0.0346
Gingivitis	22	100.00	
Cavities	14	63.63	
Fracture of Restorations	8	36.36	
Are the oral conditions of the pregnant woman related to premature birth and low weight of the baby?			<0.0001
Yes	17	77.27	
Not	3	13.63	
I don't know	2	9.10	
Do you prescribe fluoride supplements to pregnant women?			
Never	15	68.18	0.0024
Sometimes	4	18.19	
Ever	3	13.63	

Table 1. Responses of obstetricians regarding dental guidelines.

DISCUSSION

With the purpose of characterizing the research participants, it was observed that the mean age was 50.09 years (SD: 11.45), with a time since obstetric training of 23.63 years (SD: 11.85).

When approached regarding teaching during medical residency in Gynecology and Obstetrics (GO) of subjects associated with dental care during prenatal care, about seven out of ten participants (72.72%) stated that they did not receive any instruction during your training. A French study with 460 physicians and dentists showed concordant results when stating that the professionals approached pointed out flaws in the continued education of the subject, especially obstetricians during medical residency. [6] However, even without teaching during the GO medical residency, 54.54% of the participants in the present study declared that pregnant women were routinely referred for dental evaluation. The rate of referral to the dental service has numerous variables that must be considered, from the purchasing power of pregnant women to the quality of the health service provided in their location. Thus, results in the literature ranged from 12% in an Indian study to 85% in a study carried out in the private sector in the United Arab Emirates.[8,9]

Guidance on dietary control of sucrose by pregnant women was provided by 81.82% of physicians in the present study, a result similar to the study by Wilder et. al. which stated that the majority of the 55 participants stated that they had received guidance on the consumption of sugars during pregnancy.[10] Controlling sucrose consumption contributes to reducing the risk of caries and maternal weight gain during pregnancy, which may be one of the risk factors for the development

of gestational diabetes, a fact that reinforces the importance of dietary guidance during pregnancy. pregnancy. [11]

Similarly, with regard to prescribing a fluoride supplement to pregnant women, 68.18% of the participants in the present study stated that they never prescribe it. A Brazilian study carried out in the state of São Paulo with seventy-nine obstetricians shows concordant results by stating that 87% choose not to prescribe fluoride, justifying that such complementation must be performed by the dentist, if necessary.[12] The lack of scientific proof of the benefits of fluoride supplementation for pregnant women means that its prescription is not routinely recommended, in addition, its supplementation unnecessarily causes a reduction in calcium absorption, bringing harm to maternal health and of the fetus. [13]

With regard to dental procedures that the obstetricians thought were contraindicated, the majority (77.27%) stated that no procedure had a contraindication, while 13.63% declared radiography and 9.10% anesthesia. The results presented are satisfactory in relation to dental knowledge when compared with some studies in the literature that showed insufficient scientific basis on the part of physicians. As an example, a study with 200 gynecologists showed that 79% of them considered dental radiography and 74% considered the administration of local anesthesia unsafe during pregnancy.[14] Similarly, Hashim et. al.[9] identified that 73% considered dental radiographs unsafe during pregnancy and 59.30% considered administration of local anesthesia unsafe. Tirelli [15] states that every essential dental procedure can be performed during pregnancy, always considering that the interventions aim to remove the foci of infection that can be harmful to fetal development. Therefore, due to the divergence found when comparing the data with the literature, it can be concluded that the physicians addressed in the present study have greater knowledge when compared to the professionals in the comparative studies, since no dental procedure is contraindicated during pregnancy. [9, 14, 15]

The oral alterations that the participants declared most associated with pregnancy were gingivitis, correctly, with 100%, followed, incorrectly, by caries with 63.63% and fracture of restorations with 36.36%. A North American article presents similar results when pointing out that 95.00% of its respondents associated gingivitis with pregnancy, followed by 73.00% who reported cavities.[10] Boutigny et. al.[6] reports that gestational gingivitis was one of the oral manifestations most cited by the participants, and caries also had a considerable number of citations by GO physicians, results that reinforce the findings of the present study. During pregnancy, there is an increase in vascularization of the gums, in addition to the exacerbation of periodontal responses to local irritating factors.[15] It is known that cavities arise as a result of poor oral hygiene and not as a result of factors directly associated with pregnancy. [15]

Regarding the association between the oral conditions of the pregnant woman and premature birth and/or low birth weight of the baby, 77.27% of the participants declared a positive association between these variables. Cohen et. al.[16] present similar results when stating that 74.70% of respondents declared to be aware of the negative impact of dental pathologies on gestational outcomes. A study of 150 healthcare professionals from India stated that 92.00% of gynecologists stated that providing dental care during pregnancy improved pregnancy outcomes.[17] Tarannum et. al.[18] states that 63.00% of GO physicians reported that there was an association between periodontal disease and low birth weight and prematurity. Confirming the result of our study, Offenbacher et. al. [19] reports that

periodontal infection is related to premature birth or low birth weight, reinforcing the correctness of most physicians approached in the present study.

LIMITATIONS

The present study has some limitations that must be addressed. It is a cross-sectional study, making it impossible to compare future physicians recently graduated in gynecology and obstetrics with the participants of the present study. In addition, data collection was performed in only one city, which limits data generalization.

CONCLUSION

The present study showed that 72.72% of the gynecologists and obstetricians did not have dental guidance on pregnant women during their medical residency, but approximately half of the participating physicians (54.54%) stated that they usually referred their pregnant women to the dental service. When questioned about the contraindication of dental procedures during pregnancy, 77.27% of respondents correctly answered that pregnancy does not contraindicate them, as well as 77.27% correctly stated a positive relationship between dental pathologies with low birth weight or premature delivery. All participants correctly associated gingivitis with pregnancy. Fluoride supplementation was never performed correctly by 68.18% of respondents. Regarding the consumption of sucrose, 81.82% declared that they provided guidance to pregnant women about its consumption.

It is observed that the knowledge of the professionals approached was mostly consistent with what is reported in the literature. And that dental teaching in medical residency is a current need. Finally, the need for further studies with multicentric and numerous samples is highlighted in order to deepen the theme of the work.

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