

Oral and Dental Health Habits and Approaches to Dental Treatment of Pregnants in a Turkish Subpopulation: A Survey Study

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Abstract

Objective: In this study, we aimed to evaluate the oral and dental health habits of pregnant women in the Central Anatolian region and their approaches to dental treatments.

Methodology: This study was conducted in 293 randomly selected pregnant women who applied to the obstetrics and gynaecology outpatient clinic for pregnancy control and volunteered to participate in the study. The questionnaire was administered face-to-face after obtaining informed consent form from the pregnant women. The comparison of the answers to the questions according to age, education, and income was made with the chi-square test. The significance is $p < 0.05$.

Results: 120 (41%) of the pregnant women reported that they rarely brushed their teeth, while 281 (95.9%) reported that they did not have any additional oral hygiene habits. 218 (74.4%) of the pregnant women reported that they did not go to the dentist during pregnancy and 251 (85.7%) of the pregnant women did not refer them to the dentist by the obstetrician and gynaecologist. There was a significant difference between income and education in tooth brushing frequency ($p < 0.05$). There is a statistical difference according to the income level and education level of answering questions correctly about oral and dental health during pregnancy ($p < 0.05$). The rate of going to the dentist and using dental floss while planning pregnancy was higher in the age group of 26-43 ($p < 0.05$).

Conclusion: In this study, it was determined that the oral and dental hygiene habits of the pregnant women were not sufficient and they avoided dental treatment. In addition, it was observed that gynaecologists and obstetricians did not sufficiently refer women and pregnant women to the dentist. Training must be organized for pregnant women in the region in terms of oral and dental health and dental treatments during pregnancy.

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Keywords: Pregnant, oral and dental health, dental treatment.

Introduction

Hormonal and physiological changes during pregnancy cause systemic effects as well as changes in the oral cavity (1). In healthy pregnancies, physiological changes in the mother increase the maternal susceptibility to infectious diseases, including periodontal diseases (2). In addition to physiological changes during pregnancy, factors such as hormonal changes, inadequate oral care, changes in diet, changes in oral PH, suppression of the immune system can also impair or worsen the mouth and teeth (3). With the increase of estrogen and progesterone during pregnancy, it causes inflammation changes in gingival tissues and microbiological changes in

subgingival tissues(4). Gingival bleeding, swelling, redness and pain during pregnancy differ by the trimesters (5). When the periodontal status of pregnancy is evaluated according to the trimesters and postpartum, the plaque level does not change during pregnancy, but the gingival index is at the highest in the third trimester during pregnancy, but it decreases in the third month postpartum (6). Maternal oral health during pregnancy is associated with infant oral health (7).

In the literature, it is reported that periodontal inflammation can be associated with negative pregnancy outcomes in the pregnant women such as preterm birth (8). Dental treatments and good oral care prior to and during pregnancy aim to provide an ideal oral health in

pregnant women (9). However, it is a well-known fact that preventive dental practices in developing countries such as Turkey are not a priority (10).

It is important for pregnant women to have information about oral and dental hygiene to prevent negative pregnancy outcomes that may be caused by poor oral and dental health. The attitudes of gynaecologists and obstetricians also have an influence on the oral health behaviour of mothers. Keeping the maternal oral and dental health at an optimum level helps to protect the oral health of the mother and newborn.

We aimed to examine oral hygiene habits and approaches to dental treatments during pregnancy in the Central Anatolia Region.

Material and Method:

This is a cross-sectional survey study. The study was obtained from the local ethics committee. (2023/10)

The study was conducted with randomly selected pregnant women who applied to Niğde Ömer Halisdemir University Research Hospital Gynecology and Obstetrics Polyclinic for checkups during pregnancy and volunteered to participate in the study.

The questionnaire was prepared by the specialist dentist (K.K.T) taking into account the existing literature (10). The questionnaire consists of questions about socio-demographic characteristics, gestational age, oral hygiene habits, level of knowledge about oral-dental health and pregnancy outcomes, going to the dentist and referral to the dentist. (Table-1) The questionnaire was administered face-to-face after obtaining informed consent form from the pregnant women.

Statistical analysis

Jamovi (Version: 2.3.21) was used in the statistical analysis. The answers were analyzed using the descriptive statistics. The answers were compared by age, education and income with the chi-square test. The significance was $p < 0.05$.

Table-1: Survey

1. Gender:
2. Age:
3. Monthly income:.... ..
4. Gestational age:.... ..
5. Are you brushing your teeth?
A. Yes B. No
6. Do you use dental floss?
A. Yes B. No
7. Do you use mouthwash?
A. Yes B. No
8. Do you smoke?
A. Yes B. No
9. Do you drink alcohol?
A. Yes B. No
10. Do you drink coffee often?
A. Yes B. No
11. Do you know that cavities (tooth decay) and gum disease are caused by infection in the mouth?
A. Yes B. No
12. Do you think that poor oral health will have a negative effect on pregnancy?
A. Yes B. No
13. Do you think that poor oral health will have a negative effect on the baby?
A. Yes B. No
14. Did you go to the dentist during pregnancy?
A. Yes B. No
15. Do you have dental treatment during pregnancy?
A. Yes B. No
16. Did you go to the dentist while planning a pregnancy?
A. Yes B. No
17. Does bleeding gum increase during pregnancy?
A. Yes B. No
18. Do your gums bleed when brushing teeth after conception?
A. Yes B. No
19. Has your gynecologist suggested you go to the dentist?
A. Yes B. No

Result

The sociodemographic characteristics of the participants are given in Table 2. 218 (74.4%) of the pregnant women reported that they did not go to the dentist during pregnancy and 231 (78.8%) reported that they did not undergo dental treatment during pregnancy. On the other hand, 20 (6.8%) of the pregnant women reported that they went to the dentist while planning pregnancy but 251 (85.7%) reported that they were not referred by the gynaecologist and obstetrician to the dentist before pregnancy. (Table 2-3)

120 (41%) of pregnant women reported they rarely brush their teeth, 10 (3.4%) reported flossing and 21 (7.2%) reported using mouthwash. 26 (8.9%) of the pregnant women were smokers. 197 (67.2%) of the pregnant women reported that caries and gum diseases were caused by mouth infection. 79 (27%) of the pregnant women believed that poor oral and dental health had a negative effect on the maternal and infant health. 205 (70%) of the pregnant women reported that gingival bleeding increased during pregnancy. (Table 2-3)

Table 2. Demographic characteristics of the participants

Characteristic	N = 293
Age range	
16-25	118 (40%)
26-43	175 (60%)
Monthly Income	
<5000	164 (56%)
5000-10000	63 (22%)
>10000	66 (23%)
Education level	
Primary education	152 (52%)
High school	79 (27%)
University	62 (21%)
Trimester	
1st trimester	83 (28%)
2nd trimester	87 (30%)
3rd trimester	123 (42%)

n (%)

There was a significant difference between the age groups in terms of flossing, frequent coffee consumption and going to the dentist while planning pregnancy ($p < 0.05$). The group that used dental floss at the highest level and consumed coffee frequently and went to the dentist while planning pregnancy was the age

group of 26-43. The lowest rate in all three factors was recorded in the age group of 16-25. No significant difference was found in terms of other questions ($p > 0.05$). (Table 3)

There was a significant difference between incomes in tooth brushing frequency ($p < 0.05$). Women in the income group of 10,000 TRY and above reported a considerably lower tooth brushing frequency compared to other groups and they formed the group with the highest tooth brushing frequency with twice a day. There was a significant difference in the answers given to the question "Do you know that caries (tooth decay) and gum diseases are caused by mouth infection" by income ($p < 0.05$). Women in the income group of 10,000 TRY & above answered 'yes' to this question at a higher rate. There was a significant difference in the answers given to the question "Do you think poor oral health will have a negative effect on pregnancy" by income ($p < 0.05$). Women in the income group of 5,000 TRY & below answered 'yes' to this question at a lower rate. There was a significant difference in the answers given to the question "Do you think poor oral health will have a negative effect on the baby?" by income ($p < 0.05$). Women in the income group of 5,000 TRY & below answered 'yes' to this question at a lower rate. There was a significant difference in the answers given to the question "Did you go to the dentist when you were planning your pregnancy?" by income ($p < 0.05$). Women in the income group of 10,000 TRY & above answered 'yes' to this question at a higher rate. There was a significant difference in the answers given to the question "Does gingival bleeding increase during pregnancy?" and "Do your gums bleed when you brush your teeth after conception?" by income ($p < 0.05$). Women in the income group of 5,000 TRY & below answered 'yes' to this question at a higher rate. No significant difference was found in the answers given to other questions by income ($p > 0.05$) (Table 4).

A significant difference was found in the tooth brushing frequency by the level of education ($p < 0.05$). University graduates reported a considerably lower tooth brushing frequency compared to other groups, and they formed the group with the highest tooth brushing frequency with twice a day. There was also a significant difference in the use of dental floss and mouthwash ($p < 0.05$). University graduates reported that they used dental floss and mouthwash at a higher level than those in the other groups.

Table 3. Comparison of the answers given to the survey questions about dentistry by age range

	16-25 (N=18)	26-43 (N=175)	Total (N=293)	p value
Toothbrushing Frequency				0.294
rarely	53 (44.9%)	67 (38.3%)	120 (41%)	
one	39 (33.1%)	76 (43.4%)	115 (39.2%)	
2	23 (19.5%)	30 (17.1%)	53 (18.1%)	
>2	3 (2.5%)	2 (1.1%)	5 (1.7%)	
Do you use dental floss?				0.047*
Yes	1 (0.8%)	9 (5.1%)	10 (3.4%)	
No	117 (99.2%)	166 (94.9%)	283 (96.6%)	
Do you use mouthwash?				0.501
Yes	7 (5.9%)	14 (8%)	21 (7.2%)	
No	111 (94.1%)	161 (92%)	272 (92.8%)	
Do you smoke?				0.538
Yes	9 (7.6%)	17 (9.7%)	26 (8.9%)	
No	109 (92.4%)	158 (90.3%)	267 (91.1%)	
Do you drink alcohol?				-
Yes	0 (0%)	0 (0%)	0 (0%)	
No	118 (100%)	175 (100%)	293 (100%)	
Frequent coffee consumption				0.003*
Yes	14 (11.9%)	46 (26.3%)	60 (20.5%)	
No	104 (88.1%)	129 (73.7%)	233 (79.5%)	
Do you know that cavities (tooth decay) and gum disease are caused by infection in the mouth?				0.670
Yes	81 (68.6%)	116 (66.3%)	197 (67.2%)	
No	0 (0%)	1 (0.6%)	1 (0.3%)	
I don't know	37 (31.4%)	58 (33.1%)	95 (32.4%)	
Do you think that poor oral health will have a negative effect on pregnancy?				0.849
Yes	31 (26.3%)	48 (27.4%)	79 (27%)	
No	36 (30.5%)	48 (27.4%)	84 (28.7%)	
I don't know	51 (43.2%)	79 (45.1%)	130 (44.4%)	
Do you think that poor oral health will have a negative effect on the baby?				0.849
Yes	31 (26.3%)	48 (27.4%)	79 (27%)	
No	36 (30.5%)	48 (27.4%)	84 (28.7%)	
I don't know	51 (43.2%)	79 (45.1%)	130 (44.4%)	
Did you go to the dentist during pregnancy?				0.624
Yes	32 (27.1%)	43 (24.6%)	75 (25.6%)	
No	86 (72.9%)	132 (75.4%)	218 (74.4%)	
Do you have dental treatment during pregnancy?				0.777
Yes	24 (20.3%)	38 (21.7%)	62 (21.2%)	
No	94 (79.7%)	137 (78.3%)	231 (78.8%)	
Did you go to the dentist while planning a pregnancy?				0.004*
Yes	2 (1.7%)	18 (10.3%)	20 (6.8%)	
No	116 (98.3%)	157 (89.7%)	273 (93.2%)	
Does bleeding gum increase during pregnancy?				0.574
Yes	93 (78.8%)	133 (76%)	226 (77.1%)	
No	25 (21.2%)	42 (24%)	67 (22.9%)	
Do your gums bleed when brushing teeth after conception?				0.371
Yes	86 (72.9%)	119 (68%)	205 (70%)	
No	32 (27.1%)	56 (32%)	88 (30%)	
Has your gynecologist suggested you go to the dentist?				0.183
Yes	13 (11%)	29 (16.6%)	42 (14.3%)	
No	105 (89%)	146 (83.4%)	251 (85.7%)	

Table 4. Comparison of the answers given to the survey questions about dentistry according to income

	<5000 (N=164)	5000-10000 (N=63)	>10000 (N=66)	Total (N=293)	p value
Toothbrushing Frequency					0.001*
rarely	72 (43.9%)	30 (47.6%)	18 (27.3%)	120 (41%)	
one	69 (42.1%)	19 (30.2%)	27 (40.9%)	115 (39.2%)	
2	18 (11%)	14 (22.2%)	21 (31.8%)	53 (18.1%)	
>2	5 (3%)	0 (0%)	0 (0%)	5 (1.7%)	
Do you use dental floss?					0.056
Yes	5 (3%)	0 (0%)	5 (7.6%)	10 (3.4%)	
No	159 (97%)	63 (100%)	61 (92.4%)	283 (96.6%)	
Do you use mouthwash?					0.136
Yes	11 (6.7%)	2 (3.2%)	8 (12.1%)	21 (7.2%)	
No	153 (93.3%)	61 (96.8%)	58 (87.9%)	272 (92.8%)	
Do you smoke?					0.581
Yes	17 (10.4%)	4 (6.3%)	5 (7.6%)	26 (8.9%)	
No	147 (89.6%)	59 (93.7%)	61 (92.4%)	267 (91.1%)	
Do you drink alcohol?					-
Yes	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
No	164 (100%)	63 (100%)	66 (100%)	293 (100%)	
Frequent coffee consumption					0.103
Yes	27 (16.5%)	14 (22.2%)	19 (28.8%)	60 (20.5%)	
No	137 (83.5%)	49 (77.8%)	47 (71.2%)	233 (79.5%)	
Do you know that cavities (tooth decay) and gum disease are caused by infection in the mouth?					0.013*
Yes	103 (62.8%)	38 (60.3%)	56 (84.8%)	197 (67.2%)	
No	1 (0.6%)	0 (0%)	0 (0%)	1 (0.3%)	
I don't know	60 (36.6%)	25 (39.7%)	10 (15.2%)	95 (32.4%)	
Do you think that poor oral health will have a negative effect on pregnancy?					0.002*
Yes	32 (19.5%)	23 (36.5%)	24 (36.4%)	79 (27%)	
No	54 (32.9%)	9 (14.3%)	21 (31.8%)	84 (28.7%)	
I don't know	78 (47.6%)	31 (49.2%)	21 (31.8%)	130 (44.4%)	
Do you think that poor oral health will have a negative effect on the baby?					0.002*
Yes	32 (19.5%)	23 (36.5%)	24 (36.4%)	79 (27%)	
No	54 (32.9%)	9 (14.3%)	21 (31.8%)	84 (28.7%)	
I don't know	78 (47.6%)	31 (49.2%)	21 (31.8%)	130 (44.4%)	
Did you go to the dentist during pregnancy?					0.069
Yes	38 (23.2%)	13 (20.6%)	24 (36.4%)	75 (25.6%)	
No	126 (76.8%)	50 (79.4%)	42 (63.6%)	218 (74.4%)	
Do you have dental treatment during pregnancy?					0.226
Yes	31 (18.9%)	12 (19%)	19 (28.8%)	62 (21.2%)	
No	133 (81.1%)	51 (81%)	47 (71.2%)	231 (78.8%)	
Did you go to the dentist while planning a pregnancy?					< 0.001 *
Yes	2 (1.2%)	4 (6.3%)	14 (21.2%)	20 (6.8%)	
No	162 (98.8%)	59 (93.7%)	52 (78.8%)	273 (93.2%)	
Does bleeding gum increase during pregnancy?					< 0.001 *
Yes	139 (84.8%)	51 (81%)	36 (54.5%)	226 (77.1%)	
No	25 (15.2%)	12 (19%)	30 (45.5%)	67 (22.9%)	
Do your gums bleed when brushing teeth after conception?					< 0.001 *
Yes	132 (80.5%)	40 (63.5%)	33 (50%)	205 (70%)	
No	32 (19.5%)	23 (36.5%)	33 (50%)	88 (30%)	
Has your gynecologist suggested you go to the dentist?					0.071
Yes	21 (12.8%)	6 (9.5%)	15 (22.7%)	42 (14.3%)	
No	143 (87.2%)	57 (90.5%)	51 (77.3%)	251 (85.7%)	

Table 5. Comparison of the answers given to the survey questions about dentistry according to education

	primary education (N=152)	high school (N=79)	university (N=62)	Total (N=293)	p value
Toothbrushing Frequency					< 0.001 *
rarely	78 (51.3%)	33 (41.8%)	9 (14.5%)	120 (41%)	
one	55 (36.2%)	29 (36.7%)	31 (50%)	115 (39.2%)	
2	17 (11.2%)	15 (19%)	21 (33.9%)	53 (18.1%)	
>2	2 (1.3%)	2 (2.5%)	1 (1.6%)	5 (1.7%)	
Do you use dental floss?					0.004*
Yes	1 (0.7%)	3 (3.8%)	6 (9.7%)	10 (3.4%)	
No	151 (99.3%)	76 (96.2%)	56 (90.3%)	283 (96.6%)	
Do you use mouthwash?					0.007*
Yes	6 (3.9%)	5 (6.3%)	10 (16.1%)	21 (7.2%)	
No	146 (96.1%)	74 (93.7%)	52 (83.9%)	272 (92.8%)	
Do you smoke?					0.211
Yes	16 (10.5%)	8 (10.1%)	2 (3.2%)	26 (8.9%)	
No	136 (89.5%)	71 (89.9%)	60 (96.8%)	267 (91.1%)	
Do you drink alcohol?					-
Yes	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
No	152 (100%)	79 (100%)	62 (100%)	293 (100%)	
Frequent coffee consumption					0.082
Yes	27 (17.8%)	14 (17.7%)	19 (30.6%)	60 (20.5%)	
No	125 (82.2%)	65 (82.3%)	43 (69.4%)	233 (79.5%)	
Do you know that cavities (tooth decay) and gum disease are caused by infection in the mouth?					< 0.001 *
Yes	77 (50.7%)	61 (77.2%)	59 (95.2%)	197 (67.2%)	
No	1 (0.7%)	0 (0%)	0 (0%)	1 (0.3%)	
I don't know	74 (48.7%)	18 (22.8%)	3 (4.8%)	95 (32.4%)	
Do you think that poor oral health will have a negative effect on pregnancy?					< 0.001 *
Yes	22 (14.5%)	29 (36.7%)	28 (45.2%)	79 (27%)	
No	37 (24.3%)	25 (31.6%)	22 (35.5%)	84 (28.7%)	
I don't know	93 (61.2%)	25 (31.6%)	12 (19.4%)	130 (44.4%)	
Do you think that poor oral health will have a negative effect on the baby?					< 0.001 *
Yes	22 (14.5%)	29 (36.7%)	28 (45.2%)	79 (27%)	
No	37 (24.3%)	25 (31.6%)	22 (35.5%)	84 (28.7%)	
I don't know	93 (61.2%)	25 (31.6%)	12 (19.4%)	130 (44.4%)	
Did you go to the dentist during pregnancy?					0.133
Yes	35 (23%)	18 (22.8%)	22 (35.5%)	75 (25.6%)	
No	117 (77%)	61 (77.2%)	40 (64.5%)	218 (74.4%)	
Do you have dental treatment during pregnancy?					0.186
Yes	27 (17.8%)	17 (21.5%)	18 (29%)	62 (21.2%)	
No	125 (82.2%)	62 (78.5%)	44 (71%)	231 (78.8%)	
Did you go to the dentist while planning a pregnancy?					< 0.001 *
Yes	3 (2%)	2 (2.5%)	15 (24.2%)	20 (6.8%)	
No	149 (98%)	77 (97.5%)	47 (75.8%)	273 (93.2%)	
Does bleeding gum increase during pregnancy?					< 0.001 *
Yes	130 (85.5%)	63 (79.7%)	33 (53.2%)	226 (77.1%)	
No	22 (14.5%)	16 (20.3%)	29 (46.8%)	67 (22.9%)	
Do your gums bleed when brushing teeth after conception?					< 0.001 *
Yes	117 (77%)	58 (73.4%)	30 (48.4%)	205 (70%)	
No	35 (23%)	21 (26.6%)	32 (51.6%)	88 (30%)	
Did your obstetrician and gynecologist recommend you to go to the dentist before pregnancy?					0.030*
Yes	20 (13.2%)	7 (8.9%)	15 (24.2%)	42 (14.3%)	
No	132 (86.8%)	72 (91.1%)	47 (75.8%)	251 (85.7%)	

There was a significant difference in the answers given to the questions "Do you know that cavities (tooth decay) and gum diseases are caused by mouth infection?" and "Do you think poor oral health will have a negative effect on the baby?" by the level of education ($p < 0.05$). University graduates answered 'yes' to these three questions at a higher rate. There was a significant difference in the answers given to the question "Did you go to the dentist when you were planning your pregnancy?" by the level of education ($p < 0.05$). University graduates answered 'yes' to this question at a higher rate than those in the other group. There was also a significant difference in the answers given to the question "Does gingival bleeding increase during pregnancy?" and "Do your gums bleed when you brush your teeth after conception?" ($p < 0.05$). University graduates answered 'no' to these two questions at a higher rate ($p < 0.05$). There was no significant difference in the answers given to other questions by the level of education ($p > 0.05$) (Table 5).

Discussion

In this study, pregnant women reported at a high rate that they did not go to the dentist during pregnancy and avoided dental treatment and the rate of going to the dentist while planning pregnancy was low. In Australia, 30.5% of pregnant women reported going to the dentist in the last 6 months, with more than 50% unaware of the impact of poor oral and dental health on the pregnancy and the infant (11). In Malaysia, 29% of pregnant women went to the dentist (12). A study conducted in the USA indicated that only less than half of the pregnant women went to the dentist during their pregnancy (13). In a study conducted in India, 62.5% of pregnant women reported that dental treatments must be performed before pregnancy and they avoided dental treatments during pregnancy (15). Studies conducted in different regions of Turkey report that the rates of going to the dentist during pregnancy are 12.4% and 28.3% (15,16). Although the rate of going to the dentist during pregnancy and the positive approach to dental treatment in this study is close to the results of some other studies in the literature, this rate seems to be insufficient. The underlying reason may be the low socioeconomic and educational levels of the majority of the pregnant women participating in our study.

The rate of referral of the pregnant women by gynaecologists and obstetricians to the dentist was insufficient. Another current study reports that gynaecologists and obstetricians prohibited the pregnant women from going to the dentist at a high rate (17). A study conducted in France reports that 33.2% of gynaecologists and specialists routinely referred their

patients to a dentist and 26.3% provided information about oral and dental health (18). It also reports that 36% and 42% of doctors in California in 2009 and 2012, respectively provided information to the pregnant women about their oral and dental health or referred them to a dentist (19). In the same study, the rate of women who applied to the dentist during pregnancy was 38% in 2009 and 42% in 2012. 56% of women in the US state of Virginia reported that they went to the dentist before pregnancy and 47% of women reported having dental treatment during pregnancy (20). A study in India reported that gynaecologists and obstetricians referred very few people (7.97% and 4.92%) to a dentist (21).

The available evidence is that oral and dental health during pregnancy is not a priority and hygiene habits are insufficient (22-23). In this study, 39.2% of pregnant women reported brushing their teeth once a day and 18.1% twice a day, with only 3.4% using dental floss and 7.2% mouthwash. Unlike this study, Kaydrak et al. reported that 83.3% of pregnant women in Turkey had regular tooth brushing habits. They explained that the high rate of regular tooth brushing resulted from the high education level of the participants (23). Kısa et al. obtained similar results. 39.1% of pregnant women reported that they did not brush their teeth regularly during pregnancy, 28.4% brushed their teeth more than once a day, and only 4.4% used additional hygiene products other than toothbrushes for dental hygiene (10).

This study reveals that oral and dental health of pregnant women and having accurate knowledge about negative pregnancy outcomes, infant health and negative effects on oral and dental health increase as the level of income increases. Similarly, pregnant women with high income levels have more regular brushing habits, and pregnant women with low income levels have higher gingival bleeding ($p < 0.05$). In the literature, it is reported that the rate of going to the dentist is lower due to lower socioeconomic level (19,24). There was a significant difference in oral health habits and knowledge of pregnant women in different regions in India, which was explained by the difference in education level, economic level and sociocultural factors (25).

In this study, the group that used dental floss at the highest level and consumed coffee frequently and went to the dentist while planning pregnancy was the age group of 26-43. Kısa et al. reported that the rate of women with regular tooth brushing was higher among the women in the age group of 20-29 (10). On the other hand, some studies do not take into account the age factor (16,23). Further studies evaluating sociodemographic characteristics and oral hygiene habits are needed.

The study shows that the oral and dental health hygiene habits of pregnant women and their knowledge about the effect of oral and dental health and poor oral and dental health on pregnancy and infant increase as the level of education increases. University graduates went to the dentist while planning pregnancy at higher rates and gingival bleeding during pregnancy was lower in this group. In the literature, there are studies reporting that oral hygiene habits increase as the level of education increases, which supports this study (19). In the study, the rate of going to the dentist while planning pregnancy was the highest in university graduates.

Turkish women from the Central Anatolia were only included in the study and thus, the study cannot be generalized to Turkey. Multi-center studies that cover different regions are needed.

Conclusion

This study revealed that the oral and dental health habits of pregnant women were insufficient and they avoided dental treatment. It was also noted that gynaecologists and obstetricians did not refer women to the dentist before pregnancy at sufficient levels. Training about oral and dental health and dental treatments during pregnancy must be provided to the pregnant women in the region.

ETHICS COMMITTEE APPROVAL: Our study was approved by the Ethics Committee of XXX University (2023/10).

CONTRIBUTION RATES OF RESEARCHERS: Design: KTT, IT Data collection or data entry: KTT, IT, Analysis and interpretation: KTT, IT, Literature review: KTT, IT, Writing: KTT, IT.

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CONFLICT OF INTEREST

There is no conflict of interest in this study.

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