

## Self Reported Oral Health Behavior among Pregnant Women (Kerman,Iran)

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**Background And Aim:** Oral health in pregnant women due to mother and fetus health is important. The aim of the present study was to determine oral health behavior among pregnant women who attended to Kerman (Iran) health care centers.

**Methods And Material:** This cross-sectional study conducted on 138 pregnant women. Data were collected through questionnaire consist of 2 parts: 1) demographic data 2) 6 question about oral health behavior. Data analyzed in SPSS 21 using T test and  $\chi^2$  tests. p value considered at 0.05% significant level.

**Results :** The mean age of participant was  $28.3 \pm 5.46$  years. Seven and two percent of participant did not brush their teeth and 36.2% used dental floss regularly. The mean score of oral health behavior was  $13.49 \pm 2.04$  from 18. There were significant correlation between educational level, gestation week and oral health behavior ( $p=0.014, 0.027$ ) respectively.

**Conclusion:** Based the result of the present study oral health behavior among pregnant women was not enough especial in dental floss using. Women must be motivate for dental visit before pregnancy.

**Keywords:** pregnancy, oral health behavior, dental visit

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### I. Introduction

Oral health is susceptible special in pregnant women due to mother and fetus health is important.<sup>1-3</sup> Hormonal changes during pregnancy are one of the most important changes. High level of two estrogen and particularly progesterone hormones would lead to changes in blood vessels of the gums and increase in reaction to topical factors such as plaque and calculus.<sup>4</sup> Studies show pregnant women had not enough oral health behavior. In Torabi et al study 14.2% of pregnant women use regularly tooth brush, 50% did not use tooth brush.<sup>5</sup> In another study 11.2% of pregnant women brushed their teeth less than once a week.<sup>6</sup> 65% of Asian pregnant women in England brushed their teeth once a day.<sup>7</sup> Martínez-Beneyto et al showed there were correlation between pregnant women' oral health and dental caries.<sup>8</sup> Al – Swailem et al showed majority of pregnant women had not dental visit.<sup>9</sup> Thomas et al showed more than 52% of pregnant women did not have dental visit during pregnancy.<sup>10</sup> About two-thirds of the women were brushing more than once a day and almost all (94%) at least once a day.<sup>11</sup>

silveria et al showed 32.5% of pregnant women did not received oral health services. They concluded two to three fold increased odds of tooth loss and nonuse of oral health services in pregnant women with anxiety. The most important goal in pregnancy period is a health environment through dental plaque control with tooth brushing, using dental floss, and professional oral care such as scaling and root planning and polishing.<sup>10</sup> As the importance of oral health in pregnancy, the aim of the present study was to evaluate pregnant women oral health behavior who attended to government health centers in Kerman south –east of Iran in 2016.

### II. Method

This cross-sectional study conducted on 138 pregnant women who attended to government health centers, that selected through multistage sampling method. Inclusion criteria were pregnant women with general physical health without any acute or chronic disease and progressive oral disease. Also all of them were educated. Before giving questionnaire to persons, the research method was explained to them. Data were collected through a questionnaire consisted of two parts 1) demographic data (age, educational level, job, gestation age, abortion history, rank of gestation, having assurance, type of assurance) 2) self report of oral and dental care level (numbers of brushing during a day, use of dental floss and visiting dentist for complete

checkup before pregnancy, using mouth wash, cause of dental attendance). Data analyzed in SPSS 21 ,using T and chi<sup>2</sup> tests. P value were considered at 0.05% significant level.

### III. Results

The mean age of participant was 28.3±5.46 years. The age range of participant was between 15 and 45 years.61.6% were in 26-35 age group.Educational level in 37.7% of participants were diploma. 35% of participant experienced first geststion.92.8% of pregnant women had assurance.56.6% were in third semester of gestation (table 1) .7.2% of participant did not brush their teeth.36.2% used dental floss regularly .35.3% of pregnant women visited dentist for extraction their teeth. Only 16.6% of participant had dental consult ion before pregnancy(table 2) .The source of oral health education is shown in diagram 1.The main source was radio and television. The mean score of oral health behavior was 13.49±2.04 from 18.There were significant correlation between educational level , gestation week and oral health behavior(p=0.014,0.027 respectively)[table 3].

**Table 1- Demographic variables**

Variable		Number	percent
Age	15-25	40	29.0
	25-35	85	61.6
	36-45	13	9.4
Educational level	elementary	16	11.6
	Under diploma	22	15.9
	diploma	52	37.7
	bachelor	32	23.2
	Upper	10	7.2
job	Employer	22	15.9
	House wife	116	84.1
Gestation age(week)	Before 12	22	15.9
	13-24	38	27.5
	≥25	78	56.5
Having assurances	yes	128	92.8
	no	10	7.2
History of abortion	yes	36	26.1
	no	102	73.9
First gestation	yes	48	35.0
	no	90	65.0

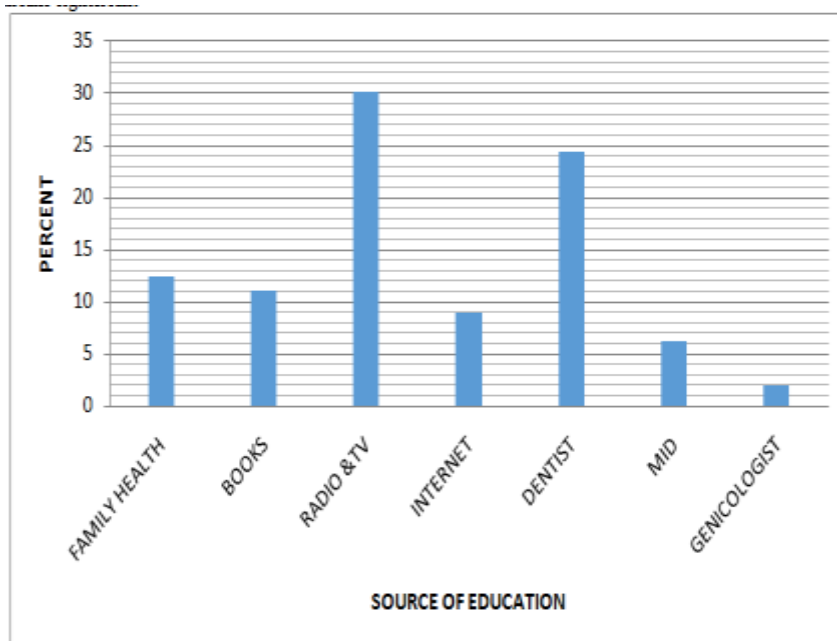
**Table 2 -Frequency of oral health behavior**

variable		Number	percent
Tooth brush frequency	never	10	7.2
	Once a day	38	27.5
	Twice a day	65	47.1
	Occasionally	25	18.1
Using dental floss	yes	50	36.2
	no	88	63.8
Using mouth wash	yes	7	5.1
	no	131	94.9
Dental consultation before pregnancy	yes	23	16.6
	no	115	83.3
Dental visit	no	26	18.8
	>One year before	38	27.5
	One year before	33	23.9
	Six month before	41	29.7
Cause of dental visit	Examination and checkup	18	15.1
	pain	32	26.9
	Tooth extraction	42	35.5
	Filling	26	2.8

**Table 3-**Correlation between demographic variable and oral health behavior

variable	B	t	sig
age	3.104	1.702	0.092
Educational level	1.713	2.493	0.014*
job	3.055	1.786	0.077
Gestation week	-2.829	-2.250	0.027*
Having Abortion having	0.589	0.291	0.772
assurances	-3.359	0.604	0.547
Type of assurances	0.388	0.482	0.631

\*means significant



**Diagram 1-** Education source of oral health

#### IV. Discussion

Pregnancy is a physiological condition that brings about various changes in the oral cavity along with other physiological changes taking place throughout the female body.<sup>13</sup>Pregnant women are more prone to tooth decay due to upturn in the acidic environment of oral cavity, increased consumption of sugary diet and carelessness toward oral health.<sup>14</sup>Studies showed pregnancy causes periodontal diseases and tooth decay.<sup>15</sup> The quantity and quality of saliva would change during pregnancy.<sup>16,17</sup>

The result of the present study show 7.2% did not brush their teeth and 18.1% brushed their teeth occasionally .In comparison with Torabi et al<sup>5</sup>study in 2006 pregnant women oral health behavior in Kerman 50% didn't brushed their teeth improved better.In fact percent of pregnant women who brushed their teeth increased .Shamsi et al<sup>6</sup> showed 4.6% of pregnant women didn't brush their teeth. These means tooth brushing habit in pregnant women has been betterduring last years.In the present study 63.8% of participants didn't use dental floss. Shamsi et al<sup>6</sup> showed 41.7% of pregnant women didn't use dental floss.It means pregnant women didn't know the benefit of dental floss for cleaning the teeth.In our study 84.9% of pregnant women didn't dental visit .In Shamsi et al 74.0% , in Al-Swailem et al studies 100% of pregnant women didn't dental visit .<sup>6,9</sup>

Hashim reported 58.3% of pregnant women in UAE visit a dentist mostly for dental pain.<sup>18</sup>The cause may be the pregnant women 'fear of dental treatments.Dental visit during pregnancy can improved oral health and decrease the adverse outcome of oral diseases.In the present study 83.3% of participants had not any dental consult before pregnancy. Perinatal oral health is important ,with significant implications for maternal , fetal and infant health.<sup>19</sup> In the present study ,significant correlation was seen between education and oral health behavior .Those had higher education had better oral health behavior .This finding is compatible with other studies.<sup>5</sup> Pregnant women education about oral health may improve the health status of them and their children.

## V. Conclusion

Based the result of the present study oral health behavior among pregnant women was not enough especial in dental floss using. Women must be motivate for dental visit before pregnancy.

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