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## MAINTENANCE OF TEETH AND MOUTH HYGIENE IN PREGNANT WOMEN IN BANDA ACEH CITY HEALTH CENTER

Henny Febriani<sup>1</sup> and Wirza<sup>2</sup>

<sup>1</sup>Department of Dental Nursing, Polytechnic of Health of Aceh-Ministry of Aceh, Indonesia

<sup>2</sup>Department of Dental Nursing, Polytechnic of Health of Aceh-Ministry of Aceh, Indonesia

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### ABSTRACT

During pregnancy there will be changes in the hormone's estrogen and progesterone. These hormonal changes will cause the tissues in the oral cavity to become more sensitive to plaque and tartar bacteria, causing a faster inflammatory response and causing symptoms of dental and oral disease. The presence of plaque bacteria in the oral cavity of pregnant women is also known to spread through the blood vessels to the fetus and disrupt the process of fetal growth and development. At that time, pregnant women must keep their teeth and mouth healthy. This study aims to determine the dental and oral care of pregnant women at Ulee Kareng Public Health Center Banda Aceh. This research is descriptive with a cross sectional study design. The sample in this study were pregnant women who performed dental and oral care, totaling 22 people with the Accidental Sampling technique. The study was conducted for one full month in December 2019. The results showed that pregnant women still did not brush their teeth properly and rarely went to the dentist during their pregnancy. So, it can be concluded that the actions of pregnant women in dental care during pregnancy are still not good and it is recommended for health workers to be more proactive in providing counseling to villages, especially pregnant women.

**KEYWORDS:** Maintenance of dental and oral hygiene, Pregnant Women

### INTRODUCTION

Every pregnant woman needs to maintain health during pregnancy, including dental and oral health. Poor dental and oral health conditions of pregnant women can have an impact on pregnancy and fetal development<sup>1</sup>. During pregnancy, hormonal changes occur, namely the hormones estrogen and progesterone. Hormonal changes in pregnant women cause various complaints such as cravings, nausea, vomiting and including complaints of tooth and mouth pain as a result of the habit of neglecting dental and oral hygiene<sup>2</sup>.

Pregnant women must realize the importance of maintaining oral health during pregnancy for themselves and the fetus they are carrying so that they can avoid oral diseases that can affect

pregnancy. Therefore, improving oral health and health promotion can reduce the occurrence of oral diseases<sup>3</sup>. Nowadays a lot of attention directed to the oral health of pregnant women for allegedly nothing to do with periodontal disease and pregnancy problems such as prematurity and low birth weight (LBW), and pre-eclampsia<sup>4</sup>.

This is influenced by the behavior of pregnant women towards the maintenance of oral health during pregnancy. Oral diseases that occur during pregnancy are not only influenced by the pregnancy itself but also by the knowledge, attitudes, and actions of pregnant women<sup>5</sup>. Efforts to maintain oral and dental health include brushing teeth, gargling with a fluoride solution<sup>6</sup>.

Dental care for pregnant women is still often considered to be harmful to the fetus, so it is often postponed until after delivery. On the contrary, the overall health of pregnant women, including dental health, will create good conditions for fetal growth and development<sup>1</sup>. Therefore, proper dental care during pregnancy may be carried out, to optimize oral health<sup>2</sup>. Maternal dental and oral care during pregnancy is not only intended for the health of the mother, but also for the health of the fetus. Dental and oral problems during pregnancy can have an impact on fetal growth abnormalities that can cause congenital abnormalities, and affect the delivery process<sup>1</sup>.

So far, pregnant women are more enthusiastic about checking their pregnancy than checking the health of their teeth and mouth. Several studies show a lack of knowledge of pregnant women on the maintenance of oral health where only 16% of pregnant women receive dental and oral health education, 97% brush their teeth, only 52% of pregnant women believe that brushing their teeth regularly will reduce the risk of problems in the oral cavity. gums and only 3.7% of pregnant women visited the dentist during. The behavior of visiting the dentist is influenced by personal factors, economic status and knowledge about the relationship between dental and oral health<sup>3</sup>. Therefore, the purpose of this study was to determine the behavior of maintaining dental and oral health of pregnant women at UPTD Puskesmas UleeKareng Banda Aceh.

## **2. METHODS**

### **Design and Data Sources**

This research is descriptive with a cross-sectional study design. Primary data were collected when pregnant women had dental and oral health checks at the UleeKareng Health Center in Banda Aceh.

### **Population and Research Sample The**

population in this study were all pregnant women who had a pregnancy checkup at the UPTD PuskesmasUleeKareng, Banda Aceh City during December 2019. The sample was 22 people and sampling were done using the technique Accidental Sampling.

### **Data Analysis The data**

in this study were analyzed univariately and presented in a frequency distribution table and narrative.

### 3. RESULTS

#### a. Characteristics of Respondents

**Table 1 Frequency Distribution of Education Level of Pregnant Women**

No	Education Level	n	%
1	primary school	1	5
2	Junior high school	1	5
3	High school	10	45
4	university	10	45
	<b>Total</b>	<b>22</b>	<b>100</b>

Most of the respondents have the latest educational background is high school and university, each 45%.

#### b. Actions of Pregnant Women in Maintaining Dental and Oral Hygiene

**Table 2 Distribution of Dental and Oral Health Maintenance Measures for Pregnant Women**

No	Dental and Oral Health Maintenance Measures for Pregnant Women	Yes		No	
		n	%	n	%
1	Brushing teeth	22	100		
2	Flossing	0	0	22	100
3	Consuming calcium supplements (food, tablets)	9	41	13	59
4	Eating foods that meet a balanced menu	21	95	1	5
5	The right time to brush your teeth	7	32	15	68

From the table above it is clear that there are still 59% of respondents who do not consume calcium supplements in the form of food or tablets and 68% of respondents did not brush their teeth at the right time.

**Table 3 Action Distribution of Pregnant Women During Pregnancy**

No	Action When Complaining Sensitive Teeth	n	%
1	Go to the dentist	3	13.63
2	Self-Medicating	4	18.18
3	No action	8	68.19
<b>No</b>	<b>Action after Vomiting</b>		
1	Gargle with water	12	54.54
2	Brushing teeth immediately oral	8	36.37
3	Not taking action	2	9.09
<b>No</b>	<b>Action to maintain dental and hygiene</b>		
1	Good	9	40.90
2	Poor	13	59.01

The results showed that there were still 68.19 % of respondents did not take action when complaining of sensitive teeth, 54.54% of respondents did gargle with water and 36.6% immediately brushed their teeth after vomiting and there were still 59.01% of respondents who were not good at maintaining dental health and mouth during pregnancy.

#### 4. DISCUSSION

The results showed that the actions of pregnant women in maintaining dental and oral hygiene were still not good at 59.09%. These results further prove that pregnant women pay less attention to dental and oral hygiene during pregnancy. This is in accordance with Gan Xia Shin's research which showed that only 56% of respondents took sufficient action, Hajikazemi et al research in Iran also showed that only 60.9% of respondents had adequate dental and oral health maintenance measures. This may be because they do not understand the relationship between oral health and pregnancy<sup>7</sup>.

Maintenance of dental and oral health should be a concern for pregnant women. During pregnancy hormonal changes occur so that there will also be changes in the oral cavity, as a result there are changes in eating patterns, changes in life behavior, complaints of cravings, nausea and vomiting. These changes can affect the quality of life of pregnant women<sup>8</sup>. Hormonal changes can increase the risk of tooth and gum loss. At this time, there is a lot of scientific evidence showing that gum disease can be a risk factor including premature birth and low birth weight (LBW) babies. Early dental and oral care can reduce the risk of high blood pressure in pregnancy (*pre-eclampsia*)<sup>9</sup>.

During pregnancy, acid levels in the mouth increase due to complaints of nausea and vomiting. This causes pregnant women to be lazy to brush their teeth as usual 2 times a day because it can trigger nausea. In addition, in pregnant women also found tooth decay due to a decrease in the degree of acidity (pH) in the mouth during pregnancy<sup>10</sup>. In addition, pregnant women are prone to gum inflammation, which is exacerbated by the hormones progesterone and estrogen, resulting in the release of histamine and proteolytic enzymes that respond to gum inflammation. The term gum inflammation in pregnant women is called "*Gingivitis Gravidarum*". The severity usually occurs in the early months to 2 or 3 and peaked in the 2nd and 3rd trimester, and the decline in pregnancy months to 9<sup>11</sup>.

For the Journal women are encouraged to brush your teeth properly as much as 2 times a day at least 2 minutes once brushing teeth, using mouthwash(mouthwash)that does not contain alcohol, use toothpaste containing fluoride, use dental floss (dental floss) to clean between teeth, eat nutritious foods, adequate intake of carbohydrates, protein, fat, calcium, vitamins A and C, magnesium, iron and folic acid, reduce sugary snacks and soft drinks. Maintaining dental and oral health is the right step for mothers and prospective children<sup>12</sup>.

## 5. CONCLUSION AND RECOMMENDATIONS

Can be concluded that 59.09% of pregnant women are still not good in performing dental and oral health care during pregnancy. So, it is suggested to health workers to be more proactive in providing counseling to pregnant women to do a medical check-up for dental health once every three months during pregnancy. Pregnant women are advised to take the time to check their teeth and mouth during a prenatal check-up.

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