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Oral Dental Health and Hygiene Maintenance for Pregnant Women at *Taram Public Health Center in Lima Puluh Kota Regency*

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ABSTRACT

Oral Health and Hygiene Maintenance for Pregnant Women at Taram Public Health Center in Lima Puluh Kota Regency. Hormonal changes in pregnant women cause various complaints, such as cravings, nausea, vomiting, including toothache as a result of neglecting oral hygiene. Changes in diet and habits of not maintaining oral hygiene due to fatigue, nausea and vomiting in some pregnant women can increase the risk of dental and oral diseases, which will affect the condition of their pregnancy. This type of research is descriptive with a sample size of 124 people taken by simple random sampling. The research was conducted at Taram Public Health Center in Lima Puluh Kota Regency. The data was collected by distributing questionnaires to determine the actions of pregnant women in maintaining oral hygiene, as well as conducting dental and oral hygiene checks based on the Oral Hygiene Index (OHIS-S). The results showed that oral health and hygiene maintenance for pregnant women in the work area of the Taram Public Health Center was good, but the oral hygiene are moderate. Based on research on 124 pregnant women in the working area of the Taram Public Health Center, it can be concluded that the oral dental and hygiene maintenance actions of pregnant women are mostly in the good category.

Keywords: Dental and Oral Health Maintenance, Oral hygiene, pregnant women.

INTRODUCTION

Pregnancy is a crucial event in a woman's and her family's lives in order to have babies. Pregnancy is a physiological process that can induce physical and mental changes in a woman's body.¹ Increased amounts of the hormones estrogen and progesterone contribute to the changes that occur during pregnancy, which affect the dental and oral health of pregnant women.^{2,3}

There is an increase in acid levels in the oral cavity during pregnancy, and if a pregnant woman has nausea and vomiting, her teeth and gums may be exposed to stomach acid. This can lead to oral health issues, which can then influence pregnancy and fetal development. In addition to hormonal and circulatory changes, the gingiva becomes more susceptible to germs and their products in pregnant women.⁴

Changes in hormones induce a variety of problems, including cravings, nausea, and vomiting, as well as toothache issues owing to neglecting dental and oral care. It is a factor predisposing to dental erosion.^{5,6} Pregnant women must understand the significance of maintaining oral health for themselves and the fetus in order to prevent oral illnesses. Health promotion and the improvement of dental and oral health can minimize the incidence of dental and oral health problems.⁷

Changes in diet and lack of dental and oral hygiene due to lethargy, nausea, and vomiting might pose a danger of dental and oral illness in some pregnant women, which will impair the state of the pregnancy as it progresses.⁴ Inflammation or swelling of the gums, tooth decay, or cavities can develop in the mouth. If pregnant women do not keep adequate oral hygiene, their gum

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inflammation will worsen, their gums will bleed readily, and they will have chewing function abnormalities. The unwillingness to clean one's teeth, the enjoyment of sour foods, or stomach acid lingering in the mouth as a result of vomiting can hasten the progress of tooth decay.⁸

It is essential for pregnant women to be aware of the importance of dental and oral hygiene. Oral hygiene status is also determined by the knowledge, attitudes, and behaviors of pregnant women about dental and oral hygiene. This is due to the fact that dental and oral hygiene might influence the likelihood of acquiring dental and oral disorders.³

Research conducted on pregnant women in Saudi Arabia found that 66.5% brushed their teeth more than once a day and 41.8% found blood afterwards. 43.5% of the respondents did not have gaps between their teeth, while 17.3% had the opportunity to experience greater damage and many pregnant women were not concerned about the possible adverse effects on pregnancy.⁹

The results of research on pregnant women in the working area of the *Kopelma Darussalam* Public Health Center in Banda Aceh showed that only 2 respondents (3.3%) had dental and oral health care in the good category, 32 respondents (53.3%) in the medium category and 26 respondents (43.3%) in the bad category.¹⁰ Research on pregnant women at Meuraxa Hospital Banda Aceh found that most of the subjects had moderate levels of oral hygiene (OHI-S), as many as 32 people (64%), 12 people (24%) had bad and 6 people (12%) had good. This shows that most pregnant women only focus on their pregnancy and pay little attention to dental and oral health.¹¹

According to study done at the *Pandanwangi* Public Health Center in Malang, the majority of respondents' activities during pregnancy were moderate, namely 34 respondents (68%) out of a total of 48 respondents. The majority of respondents' dental and oral hygiene levels during pregnancy were moderate, with 33 respondents (66%) falling into this category.¹²

The phenomenon that is often found in pregnant women is that they do not carry out good and correct dental and oral health maintenance. They still practice the same habits as before pregnancy, such as brushing their teeth only once a day, consuming less fiber-containing fruits and vegetables, preferring to eat sweet foods and not rinsing their mouth afterward, and rarely consulting a dentist to check the health of their teeth and mouth.

Based on the description of the background, the researchers are interested in finding out more about oral dental health and hygiene maintenance for pregnant women at *Taram* Public Health Center in *Lima Puluh Kota* Regency.

METHOD

The type of research used is descriptive, namely a method of making an objective description of a situation. The population in this study were all pregnant women in the working area of *Taram* Public Health Center, with a total of 179 people. Determination of the research sample using simple random sampling technique by lottery. The sample consisted of 124 pregnant women in the working area of *Taram* Public Health Center who met the inclusion criteria, were able to read and write and were willing to become respondents by filling out informed consent.

Data collection was carried out by distributing questionnaires to find out the actions of pregnant women in maintaining oral hygiene, as well as carrying out dental and oral hygiene examinations for pregnant women based on the Oral Hygiene Index (OHIS-S). The measurement result is that the questionnaire used has fulfilled the validity and reliability requirements in the preliminary test.

Results

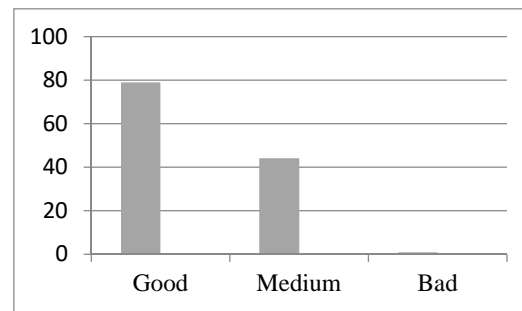


Figure 1. Frequency distribution of oral dental and hygiene maintenance actions in pregnant women

Figure 1 shows an overview of oral dental and hygiene maintenance for 124 pregnant women in good category, 79 people (63.7%), 44 people in the medium category (35.5%) and only 1 person in the bad category (0.8%).

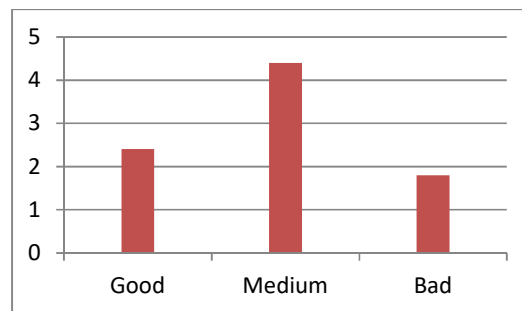


Figure 2. Distribution of oral hygiene frequency

Figure 2 shows the frequency distribution of oral hygiene among pregnant women. The results showed that the OHI-S criteria for pregnant women at *Taram* Public Health Center in Lima Puluh Kota Regency, were mostly moderate criteria, namely 59.7% (74 people) and the least bad criteria, namely 19.3% (24 people).

DISCUSSION

1. Oral Dental and Hygiene Maintenance Actions for Pregnant Women

Figure 1 shows an overview of oral dental and hygiene maintenance for 124 pregnant women in good category, 79 people (63.7%), 44 people in the medium category (35.5%) and only 1 person in the bad category (0.8%).

Dental and oral health maintenance actions include time and frequency of brushing teeth, how to brush teeth, selecting a toothbrush, using fluoridated toothpaste, taking care of oral hygiene after vomiting and consuming food, food consumption patterns, frequency of consumption of fruits and vegetables, frequency of visits to the dentist or dental health service in a year, and toothache treatment.¹³

According to the findings of the study, the majority of respondents performed correct oral dental and hygiene maintenance actions, such as brushing their teeth twice day, but at the incorrect time. After waking up in the morning, before breakfast, and during the afternoon shower, this improper tooth-brushing behavior occurs. The optimal time to clean your teeth is after breakfast and before bedtime. Because they frequently feel queasy when brushing their teeth, first-trimester pregnant women only clean their teeth once in order to eliminate foul breath.

Good and correct tooth brushing is brushing the teeth in a way that can clean the entire surface of the teeth without injuring the soft tissues in the mouth and is done sequentially from one side to the other on a regular basis. In order not to injure the soft tissues in the mouth (gums and cheeks), it is recommended to use a toothbrush with medium soft bristles, not too hard but not too soft either.¹⁴

The results of the research on the selection of toothbrushes showed good results, respondents used toothbrushes with fine bristles and narrow ends and carried out according to the instructions of the officer.

Actions to maintain dental and oral health are what respondents do related to disease prevention, how to improve oral health and how to get the right treatment.¹⁵

Pregnant women are advised to avoid eating sweet and sticky foods, because this makes it easier for oral cavity bacteria to create an acidic atmosphere which eventually damages the protective layer of teeth. Pregnant women who cannot give up this habit are advised to immediately clean their teeth and mouth, at least by rinsing their mouths. -gargle.¹

The results of other studies assessing the frequency of consumption of fruits and vegetables show a fairly good picture of action.

All pregnant women use toothpaste containing fluoride when brushing their teeth. Respondents have had 100% good action but personally do not understand the benefits of adding fluorine in toothpaste because all toothpaste currently circulating in Indonesia already contains fluorine.

Dental and oral health checks must be carried out regularly, both when you feel sick and when you have no complaints. In fact, ideally, dental and oral health examinations are carried out if someone is planning or expecting pregnancy, so that when she is pregnant her dental and oral health conditions are in good condition. Pregnant women who feel complaints about their teeth and mouth should go to a dental health service facility as soon as possible to get a dental examination and treatment so that pregnant women avoid getting worse dental and mouth disease.¹⁴

The results of this study are in line with research on dental and oral health maintenance behavior of pregnant women at *Bahu Manado* Public Health Center. Based on this research, it is known that the actions of pregnant women in maintaining oral health at *Bahu Manado* Public Health Center are classified as good category with a score of 502 (83.7%).¹⁶

2. Oral Hygiene for Pregnant Women

The results showed that the OHI-S criteria for pregnant women at the *Taram* Public Health Center, Lima Pulu Kota Regency, were mostly moderate criteria, namely 59.7% (74 people) and the least bad criteria, namely 19.3% (24 people).).

Respondents who have good OHI-S, because respondents already know the information on maintaining proper oral hygiene through counseling and advertising media. While respondents who were included in the bad category were caused by these respondents not rinsing their mouths every time they vomited or rarely brushing their teeth in the morning. This is in accordance with the results of filling out the questionnaire that some respondents never rinse their mouths or brush their teeth immediately after vomiting.

In general, there are several things that need to be emphasized to pregnant women in maintaining oral and dental health to avoid dental and oral diseases during pregnancy, namely if pregnant women experience vomiting, immediately clean their mouths by gargling with a cup of water.¹⁴

Sarwono in Widi ER said that one of the factors that influence the level of dental and oral hygiene is a behavioral factor. Behavior is a form of experience and interaction of individuals with their environment, especially those related to health. The most important factor in efforts to maintain dental and oral hygiene is the awareness and behavior factor in maintaining dental and oral health in person because the activities are carried out at home without any supervision from anyone, completely depending on the understanding, awareness and willingness of the individual to maintain oral hygiene.¹⁷

The results of this study are in line with research conducted at *Pandanwangi* Public Health Center in Malang, which found that most of the respondents' dental and oral hygiene levels during pregnancy were moderate, namely 33 respondents (66%).¹²

CONSLUSION AND SUGGESTION

Conclusion

Based on a study of 124 pregnant women at *Taram* Public Health Center, it can be concluded as follows:

1. Most of oral dental and hygiene maintenance actions of pregnant women are in the good category.
2. Oral hygiene of pregnant women is mostly with medium criteria.

Suggestion

1. Pregnant Women
 - a. In order to take good care of your teeth and mouth during pregnancy, you should keep your teeth and mouth clean by rinsing your mouth after every vomiting and brushing your teeth at the right time (in the morning after breakfast and at night).
 - b. To check dental and oral health every 6 months to prevent dental and oral health problems.
2. Relevant service/service agencies
 - a. To MCH program holders at the public health center to provide counseling about dental and oral care to pregnant women who check their pregnancies.
 - b. To provide brochures about the importance of maintaining oral and dental health during pregnancy to every pregnant woman.
 - c. To carry out dental and oral examinations for every pregnant woman who undergoes a pregnancy check-up.

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