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Factors Influencing Pregnant Women's Intent to Undergo Dental and Oral Examinations during Antenatal Care (K1) Visits

Ida Chairanna Mahirawatie[1*], I.G.A. Kusuma Astuti
Department of Dental Health, Poltekkes Kemenkes Surabaya, Indonesia
***Corresponding author:** ida.chairanna@poltekkesdepkes-sby.ac.id*

ABSTRACT

Introduction: Maternal health during pregnancy is a significant concern, as a substantial portion of maternal deaths worldwide, including in Indonesia, are attributed to infections. Dental and oral diseases are among the primary causes of such infections. This study addresses the low uptake of dental and oral examinations among pregnant women during their first antenatal care (K1) visit. **Aim:** To examine the factors influencing pregnant women's intent to undergo dental and oral examinations as part of their antenatal care (K1). **Material and Methods:** A quasi-experimental study with a non-equivalent control group design was conducted. Pregnant women were divided into a treatment group that received maternal independence training and a control group that received no intervention. A pre-test was administered to both groups. The sample consisted of 60 pregnant women from various in Gunung Anyar district, Surabaya. **Results:** Age, occupation, and outcome expectancies did not significantly influence the intent to undergo dental examinations. However, education level, self-efficacy, and perceived risk were significant predictors of intent. Self-efficacy was the strongest predictor, with higher odds ratios in both the treatment and control groups. **Conclusion:** Factors such as education, self-efficacy, and perceived risk significantly influence pregnant women's intent to undergo dental and oral examinations during their first antenatal care visit. Interventions aimed at enhancing self-efficacy may be effective in increasing uptake of these services.

Keywords: Intention, Antenatal Care (K1), Dental and oral examinations, Pregnant women

INTRODUCTION

Gingivitis is the most prevalent oral manifestation during pregnancy, affecting approximately 60-70% of expectant mothers. Other studies have reported gingivitis prevalence rates among pregnant women ranging from 30% to 100%[1]. Common periodontal conditions observed in pregnant women include gingivitis and periodontitis. In Surabaya, a study conducted in eight community health centers revealed that 73% of pregnant women experienced gingivitis, and 36% suffered from periodontitis[2].

Pregnancy is closely linked to oral health. Poor oral hygiene can lead to various oral diseases due to hormonal imbalances and local irritants in the oral cavity. Indonesia has the second highest prevalence of low birth weight (LBW) babies among ASEAN countries, with a rate of 6.2% according to the 2017 Indonesian Demographic and Health Survey. According to Surabaya's 2021 Community Health Center Performance Assessment Guidelines, the target for dental examinations among all pregnant women during their first antenatal care (K1) visit was 100%. However, this target has not been fully achieved[3].

Motivating pregnant women to increase their intention to undergo dental and oral examinations during their first antenatal care visit, a Health Action Process Approach (HAPA) can be employed. HAPA is a framework that

suggests behavioral change can be achieved by enhancing motivation during the motivational phase[4].

RESULT AND DISCUSSION

The research respondents for the treatment group consisted of 30 pregnant women in Gunung Anyar village, Surabaya, while the control group consisted of 30 pregnant women in Gunung Anyar Tambak village, Surabaya.

Table 1. Characteristics of Pregnant Women during their First Antenatal Care (K1) Visit for Dental Check-up in Gunung Anyar, Surabaya, 2024

Characteristics	Treatment Group		Control Group		Total		Homogeneity Test (p)
	f	%	f	%	f	%	
Occupation							Equivalent
Housewife (IRT)	25	83%	25	83%	50	83%	
Trader	2	7%	2	7%	4	7%	
Civil Servant PNS	2	7%	0	0%	2	3%	
Entrepreneur	1	3%	3	10%	4	7%	
Age (Years)							Equivalent
17-25	6	20%	5	17%	11	18%	
26-35	19	63%	20	66%	39	65%	
36-45	5	17%	5	17%	10	17%	
Education							Equivalent
Elementary School (SD)	0	0%	0	0%	0	0%	
Junior High School (SMP)	2	7%	1	3%	3	5%	
High School (SMA)	22	73%	21	70%	43	72%	
Diploma	0	0%	2	7%	2	3%	
Bachelor Degree (S1)	6	20%	6	20%	12	20%	

Table 1, shows the characteristics of respondents from both groups. According to gender, both the treatment and control groups consist of 30 (100%) women and 0 (0%) men. In terms of age, the majority of the treatment group is between 26-35 years old, with 19 people (63%), while the majority of the control group is also between 26-35 years old, with 20 people (66%). The majority of the treatment group has a high school education, with 22 people (73%), and the control group also has a majority with a high school education, with 21 people (70%). The most common occupation in both the treatment and control groups is housewife (IRT), with 25 people (83%) in each group.

Table 2. Results of the Normality Test Treatment Group and Control Group of Pregnant Women in Gunung Anyar Subdistrict, Surabaya, 2024

Variabel	Treatment Group				Control Group			
	Mean	SD	p (Sig.)	Ket.	Mean	SD	p (Sig.)	Ket
Job	1	0.928	0.001	Non Sig.	1	0.978	0.001	Non Sig.
Age	26-35	0.587	0.001	Non Sig.	26-35	0.657	0.001	Non Sig.
Education	3	0.858	0.001	Non	3	0.769	0.001	Non

				Sig.				Sig.
Knowledge	69.37	5.304	0.006	Non Sig.	68.27	5.610	0.004	Non Sig

The table above (Table 2) shows that for all variables (Job, Age, Education, Knowledge) in the treatment group, the p-value is < 0.05, while in the control group, the p-value is < 0.05. This indicates that both sample groups are not normally distributed because p < 0.05. Therefore, a Non-Parametric Statistical Test was used.

Table 3. Distribution of Pregnant Women's Intentions for Antenatal Care (K1) Visits Treatment Group and Control Group in Gunung Anyar Subdistrict, Surabaya, 2024

Intention	Treatment		Control	
	N	%	N	%
No Intention	6	20.0%	11	36.7%
Intention	24	80.0%	19	63.3%
Total	30	100.0%	30	100.0%

Table 3 shows that 24 respondents (80%) in the treatment group and 19 respondents (61.3%) in the control group have the intention to undergo antenatal care (K1 visits) to the dental health clinic.

Table 4. Characteristics of Pregnant Women's Intentions during the First Antenatal Care (ANC) Visit (K1) for Dental Check-ups in the Treatment and Control Groups in Gunung Anyar Subdistrict, Surabaya, 2024

Characteristics of Pregnant Women	Treatment Group				Control Group			
	No Intention		Intention		No Intention		Intention	
	N	%	N	%	N	%	N	%
Occupation								
Housewife (IRT)	6	20.0%	19	63.3%	9	30.0%	16	53.3%
Trader	0	0.0%	2	6.7%	1	3.3%	1	3.3%
Civilervant (PNS)	0	0.0%	0	0.0%	0	0.0%	0	0.,0%
Entrepreneur	0	0.0%	3	10.0%	1	3.3%	2	6.7%
Others	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Age (years)								
17-25	1	3.3%	5	16.8%	2	6.7%	3	10.0%
26-35	4	13.3%	15	50.0%	7	23.3%	13	43.3%
36-45	1	3.3&	4	13.3%	2	6.7%	3	10.0%
Education								
Elementary School	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Junior High School	2	6.7%	1	3,3%	0	0.0%	1	3.3%
Senior High School	4	13.3%	17	56.7%	7	23.3%	14	46.8%
Diploma	0	0.0%	0	0.0%	1	3.3%	1	3.3%
Bachelor's Degree (S1)	0	0.0%	6	20.0%	3	10.0%	3	10.0%

Occupation: In the treatment group, the highest number of respondents with the intention to visit K1 (antenatal care) for dental check-ups were housewives, with 19 (63.3%). Similarly, in the control group, the highest number of respondents with the intention to visit K1 for dental check-ups were also housewives, with 16 (53.3%).

Age: In the treatment group, the highest number of respondents with the intention to visit K1 for dental check-ups were aged 26-35, with 15 (50%). In the control group, the highest number of respondents with the intention to visit K1

for dental check-ups were also aged 26-35, with 13 (43.3%).

Education: In the treatment group, the highest number of respondents with the intention to visit K1 for dental check-ups had a senior high school education, with 17 (56.7%). In the control group, the highest number of respondents with the intention to visit K1 for dental check-ups also had a senior high school education, with 14 (46.8%).

Table 5. Wilcoxon Changes in Dental Health Efforts (Self-Efficacy) among Pregnant Women in the Treatment and Control Groups in Gunung Anyar Subdistrict, Surabaya, 2024

Variables		Treatment Group					Control Group				
		Pre	Post	□	p	Note	Pre	Post	□	p	Note
Self Efficacy	Mean	69.50	90.97	21.47	0.001	Sig.	65.87	67.00	1.13	0.17	Non Sig
	SD	3.73	6,568	-			4.424	4.185			
Outcome Expectancies	Mean	70.27	96.63	26.36	0.001	Sig.	67.43	68.43	1.00	0.16	Non Sig
	SD	3.841	4.298	-			5.685	6.135			
Risk Perception	Mean	70.47	85.67	15.20	0.001	Sig.	66.40	67.63	1.23	0.41	Non Sig.
	SD	20.39	8.01	-			5.805	5.798			

Based on the Wilcoxon statistical test results in Table 5, the treatment group showed significant changes in Self-Efficacy, Outcome Expectations, and Risk Perception, as indicated by p-values < 0.05. This means that the interventions provided to the treatment group had a significant impact. In the control group, although there were changes in Self-Efficacy, Outcome Expectations, and Risk Perception, they were not significant, as indicated by p-values > 0.05.

Table 6. Mann-Whitney Differences in Pregnant Women between Treatment and Control Groups in Gunung Anyar Subdistrict, Surabaya, 2024

Variabel	Treatment Group			Control Group			p (Sig.)	Note
	n	Mean	SD	n	Mean	SD		
Self Efficacy	30	35.27	3.865	30	25.73	3.865	0.260	Sig
Outcome Expectancies	*30*	34.08	4.790	30	26.92	4.790	0.099	Sig.
Risk Perception	30	33.08	7.071	30	27.92	7.071	0.236	Sig.

Based on the Mann-Whitney statistical test results in Table 6 Using the test, the variables of Self-Efficacy, Outcome Expectations, and Risk Perception show p-values > 0.05, indicating significant differences between the treatment and control groups in these variables.

Table 7. Self-Efficacy, Outcome Expectancies, and Risk Perception on Pregnant Women's Intentions in the Treatment Group

Variable Indeoendence	Pregnant Women's Intentions (Treatment Group)							
	Before				After			
	No Intentiom		Intention		No Intention		Intention	
	N	%	N	%	N	%	N	%

Self Efficacy	Good	0	0.0%	4	13.4%	0	0.0%	29	96.7%
	Moderate	6	20.0%	19	63.3%	0	0.0%	1	3.3%
	Poor	0	0.0%	1	3.3%	0	0.0%	0	0.0%
Outcome Expectancies	Good	0	0.0%	1	3.3%	0	0.0%	30	100.0%
	Moderate	6	20.0%	23	76.7%	0	0.0%	0	0.0%
	Poor	0	0.0%	0	0.0%	0	0l0%	0	0.0%
Risk Perception	Good	0	0%	1	3.3%	0	0.0%	29	96.7%
	Moderate	6	20.0%	23	76.7%	0	0.0%	1	3.3%
	Poor	0	0.0%	0	0.0%	0	0.0%	0	0.0%

In Table 7, after training in the treatment group, it is evident that in all independent variables (Self-Efficacy, Outcome Expectancies, Risk Perception), the intention of pregnant women to attend the first visit to the dental clinic (K1) showed a change from 20% who initially did not intend to 0%.

Table 8. Self-Efficacy, Outcome Expectancies, and Risk Perception on Pregnant Women's Intentions in the Control Group

Variabel Independen		Pregnant Women's Intentions (Control Group)							
		Before				Before			
		No Intentiom		No Intentiom		No Intentiom		No Intentiom	
		N	%	N	%	N	%	N	%
Self Efficacy	Good	0	0.0%	0	0.0%	0	0.0%	0	.00%
	Moderate	11	36.7%	19	63.3.0	11	36.7	18	60.0%
	Poor	0	0.0%	0	0.0%	1	3.3	0	0.0%
Outcome Expectancies	Good	0	0.0%	2	6.7%	0	0.0%	3	10.0%
	Moderate	11	36.7%	16	53.3%	11	36.7	15	50.0%
	Poor	0	0.0%	1	3.3%	0	0.0%	1	3.3%
Risk Perception	Good	1	3.3%	1	3.3%	1	3.3%	0	0.0%
	Moderate	10	33.3%	17	56.8%	10	33.3%	18	60.1%
	Poor	0	0.0%	1	3.3%	0	0.0%	1	3.3%

In Table 8, for the control group, it is observed that in all independent variables (Self-Efficacy, Outcome Expectancies, Risk Perception), there was no change in the intention of pregnant women to attend the first visit to the dental clinic (K1), remaining at 33.3%.

In this study, there are six independent variables: Age, Education, Occupation, Self-Efficacy, Outcome Expectancies, and Risk Perception, as well as one dependent variable: Pregnant Women's Intent for Antenatal Care (K1) Dental and Oral Examinations. To determine whether there is an effect and the extent of the influence of the independent variables on the dependent variable, Multiple Regression analysis was conducted using the SmartPLS.4 application.

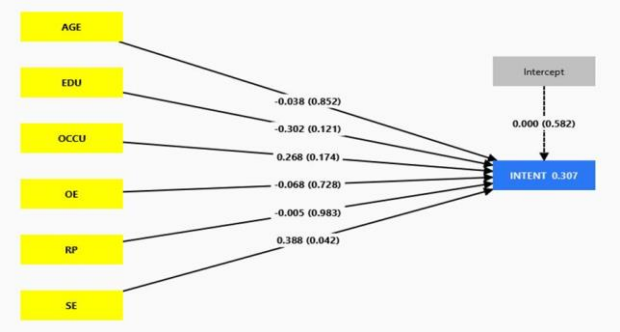

Figure 1. The Multiple Regression Modeling diagram

The Multiple Regression Modeling diagram above shows that only one independent variable has an influence on the dependent variable (Pregnant Women's Intent), which is the Self-Efficacy variable, with a p-value of 0.042 < 0.05. In contrast, the variables Outcome Expectancies, Risk Perception, Occupation, Education, and Age are not found to have any influence on the dependent variable (Pregnant Women's Intent) as their p-values are greater than 0.05. The independent variable Self-Efficacy, which influences the dependent variable, has a Standardized Coefficient value of 0.388, with its impact on the dependent variable amounting to 30.70%.

Characteristics of Study Subjects

The characteristics of the respondents examined in this study include age, education, and occupation. The study involved a total of 60 respondents before and during pregnancy, with 30 individuals in the treatment group and 30 individuals in the control group. In the treatment group, the majority of mothers before and during pregnancy in Gunung Anyar, Surabaya, fall into the age group of 26-35 years. Regarding the educational background, most respondents had completed high school (SMA). Additionally, the predominant occupation of mothers before and during pregnancy in Gunung Anyar, Surabaya, was housewife.

In the control group, the majority of mothers before and during pregnancy in Gunung Anyar Tambak, Surabaya, also fall into the age group of 26-35 years. Similarly, the most common educational background among respondents was high school (SMA). The primary occupation of mothers before and during pregnancy in Gunung Anyar Tambak, Surabaya, was also housewife.

Intent of Pregnant Women to Seek Dental and Oral Health Care

Intent is an individual's behavior driven by factors such as attitude and subjective norms, which motivate individuals to act. According to the Theory of Planned Behavior[4], intent plays a crucial role in the emergence of an individual's behavioral intentions. In this study, intent is categorized into two groups: pregnant women who intend to and those who do not intend to visit for antenatal care (K1) for dental and oral examinations[5].

Based on statistical results, more than half of the pregnant women in Gunung Anyar, Surabaya, intend to visit the Gunung Anyar Health Center for antenatal care (K1) regarding dental and oral examinations. Reasons for pregnant women intending to seek dental and oral health care include: (1) to identify dental and oral health issues, (2) to prevent bacterial transmission to the fetus, (3) to receive education on dental care during pregnancy, and (4) to plan for dental care during pregnancy.

Dental and oral health issues, such as gingivitis and periodontitis, can increase the risk of pregnancy complications, including preterm birth and low birth weight. This aligns with[6], which found a significant relationship between periodontal disease in pregnant women and low birth weight occurrences. Bacteria from dental infections can enter the bloodstream and reach the fetus, increasing the risk of intrauterine infection. This is consistent with previous study, which states that bacterial infections can affect pregnant women, fetuses, and newborns. Similar to viral infections, the examination, treatment, and prevention of these infections are crucial for reducing pregnancy complications[7].

Education on dental care during pregnancy involves counseling on safe dental practices, including brushing habits. Hormonal changes during pregnancy increase the risk of gingivitis, which can be harmful to both mother and baby[8]. Therefore, counseling by doctors or midwives, referring to a dentist for understanding dental and oral health during pregnancy, brushing techniques, flossing, and dietary recommendations to prevent

pregnancy complications due to poor dental health, is essential.

Hormonal changes during pregnancy can affect gum health, leading to pregnancy gingivitis, which, if untreated, can develop into more serious issues. This is supported by, which notes signs of gingivitis during pregnancy include gum inflammation, swelling, and bleeding. Hormonal changes increase susceptibility to gum issues and potentially worsen dental infections[9].

Planning for dental care during pregnancy involves determining the appropriate timing for necessary dental treatments, such as fillings or extractions, which can be safely performed during certain trimesters. According to[2], increasing knowledge about dental and oral health care for pregnant women, especially regarding periodontal health, can reduce the risk of low birth weight and other adverse effects on maternal and fetal health.

Less than half of the pregnant women who do not intend to visit the antenatal care (K1) for dental and oral examinations at the Gunung Anyar Health Center cite reasons such as: (1) lack of knowledge about dental and oral health, (2) lack of perceived dental and oral health issues, and (3) fear or anxiety about visiting the dental clinic.

A lack of knowledge about dental and oral health leads pregnant women to underestimate the importance of dental check-ups during pregnancy, or they may believe that dental health does not affect pregnancy. Islam[10] found that prioritizing dental and oral health during pregnancy is crucial for overall health and minimizing risks. Routine check-ups, preventive measures, and oral hygiene practices are essential. Dental health professionals play a key role in assisting pregnant women in maintaining dental health for the safety of both mother and baby before birth.

If pregnant women do not experience any symptoms, they may feel there is no need to seek dental care. This is consistent with Alanazy study[11], which notes that the absence of symptoms during pregnancy leads to lower antenatal care behaviors. Previous study suggests that low motivation to visit health services is due to the lack of perceived issues, resulting in the belief that health services are unnecessary. Routine pregnancy check-ups and early detection of complications are needed to monitor pregnancy development[12].Fear or anxiety about dental procedures, especially if the pregnant woman has had previous unpleasant experiences, can also be a factor. Solhi[13] found that negative experiences with dental care, pain, or discomfort since the last visit can cause anxiety in pregnant women.

Good knowledge and attitude towards dental and oral health can guide pregnant women to be more compliant in their intent to visit the antenatal care (K1) for dental and oral examinations at the Gunung Anyar Health Center. According to the Theory of Planned Behavior (TPB) components: (1) Attitude toward the Behavior, the attitude of pregnant women towards dental check-ups is influenced by their beliefs about the health benefits of such check-ups, leading them to prevent toothaches and feel healthier. (2) Subjective Norms, if family or healthcare providers support and encourage dental visits, pregnant women are more likely to have a stronger intention to undergo them. (3) Perceived Behavioral Control, if pregnant women have adequate support and resources for dental check-ups, they are more likely to have a strong intention to do so.

In decision-making, intention is influenced by attitude, subjective norms, and perceived behavioral control[7]. According previous study, intention is a key factor in health behavior change4. Ajzen, as cited suggested that intention acts as a mediator for addressing behavioral gaps. Since behavior cannot be predicted well by attitude alone, intention serves as a useful mediator and a proximal predictor for many behaviors. It is now agreed that intention is a crucial variable in explaining

and predicting behavior according to the Theory of Planned Behavior (TPB)[14].

The Influence of Maternal Age on the Intention to Seek Dental Care

Age is an index that places individuals in a developmental sequence. Further explains that age is merely a rough index of the aging process, encompassing biological, psychological, sociological, and cultural aspects. Based on the research results in both the treatment and control groups, the majority of pregnant women fall within the age range of 26-35 years. According to age group classifications, 26-35 years is categorized as early adulthood[15]. Statistical analysis indicates that there is no significant effect of maternal age on the intention to undergo antenatal care (K1) for dental and oral examinations in both the treatment and control groups. This lack of effect is attributed to the fact that, regardless of age, pregnant women with better knowledge about the importance of dental health during pregnancy are more likely to seek dental care. Awareness of the importance of dental and oral health can be prevalent across various age groups, whether young or old, during pregnancy.

This finding contrasts with the study by Damayanti[16], which suggested that predisposing factors affecting pregnant women's compliance with antenatal care include age. According to this study, age influences a person's mindset, with women of productive age (20-35 years) being able to think more rationally compared to younger or older women. Thus, women of productive age may have a greater motivation to seek antenatal care.

According to Notoatmodjo[17], one of the factors influencing knowledge is age. Age is related to cognitive processes and memory, which in turn affects the reception of information. Prenatal programs and counsel can provide education about the importance of dental and oral health to all pregnant women regardless of age. As age increases, life experiences and understanding of the importance of maintaining dental and oral health tend to improve, which may foster a stronger intention to seek dental care during pregnancy. Thus, increasing age might reduce the influence of age on the intention of pregnant women. Pregnant women in the adult age category may have previous pregnancy experiences. These experiences could enhance their awareness of the importance of dental and oral examinations, influencing their intention to seek dental care during pregnancy.

The Effect of Maternal Education on the Intention to Seek Dental Health Check-ups

Education is a comprehensive process integral to human development that involves more than merely being present in a classroom or formal institution such as a school. The definition of education also encompasses the act or process of teaching, where discipline is applied to an individual's mind or character. Education is not a static entity; rather, it is a dynamic instrument of change[18].

In this study, education refers to the highest level of education achieved by the respondents, in this case, pregnant women. Statistical data indicate that, in both the treatment and control groups, there was no significant effect of maternal education on the intention to attend antenatal care (K1) for dental and oral examinations. This situation arises because higher education is often related to pregnant women's knowledge about the importance of dental health care during pregnancy. A better understanding of the risks of dental and oral infections that can impact maternal and fetal health may lead to better motivation among educated women to undergo regular dental and oral health check-ups.

The study's findings contradict the theory proposed by previous study[17], which suggests that pregnant women with higher levels of education tend to have better awareness of the importance of maintaining health. Thus, educated mothers are expected to be more aware of dental health and its connection to pregnancy outcomes,

such as the risks of premature birth and low birth weight (LBW).

Infants born to mothers with poor dental health, including untreated cavities and gum disease, are more likely to be born with low birth weight (LBW). This highlights the impact of maternal dental health on infant outcomes. Education influences decision-making, including health-related decisions. Pregnant women with higher education levels are more likely to make informed and evidence-based decisions, enhancing their autonomy and reducing the influence of negative social pressures, including decisions related to dental and oral health check-ups[2].

The study's results also do not align with the findings of Sukarsih[19], which suggest that knowledge, acquired through both formal and informal education, significantly affects the ability to recognize pregnancy danger signs. Educational level is a key factor in influencing an individual's decision to engage in healthy behaviors.

The Effect of Pregnant Women's Employment Status on the Intention to Seek Dental Health Care

Employment status is a primary activity undertaken by respondents who are pregnant women and earn an income. Based on the results of this study, the majority of pregnant women are classified as homemakers. Statistical testing in both the treatment and control groups shows that there is no significant effect of employment status on the intention to attend antenatal care (K1) for dental and oral examinations. This situation is attributed to pregnant women being more focused on their work than on fetal health, making employment status a secondary factor in their intention to seek dental care[20].

This finding aligns with previous study[20], which suggests that pregnant women may perceive antenatal care as not particularly important, often neglecting it because these visits have not become a priority for them. The lack of ANC visits can lead to pregnant women being less informed about proper pregnancy care, the dangers of early pregnancy, complications or coexisting diseases during pregnancy, such as chronic conditions (heart disease, lung disease) and genetic disorders (diabetes, hypertension, congenital defects) which may go undetected.

Although pregnant women classified as homemakers (IRT) have ample time, they often hold misconceptions that dental care is unnecessary during pregnancy or that dental procedures could harm the pregnancy, which is not the case. According toWijaksana[2], there is no national data showing the number of pregnant women who receive dental care during pregnancy. Conversely, almost all pregnant women in Indonesia (95.4%) undergo pregnancy check-ups, with a frequency of at least four visits during pregnancy being 83.5 percent. Ideally, pregnant women should consult a dentist for dental and oral health checks during pregnancy. However, many countries, including Indonesia, lack guidelines for this procedure.

The Influence of Self-Efficacy on Pregnant Women's Intention to Undergo Dental Health Check-Ups

Self-efficacy refers to an individual's belief in their ability to perform specific behaviors or actions required to achieve desired health outcomes. This belief affects both the intention to engage in a behavior and the actual performance of that behavior. Based on statistical tests conducted on both the treatment and control groups, it was found that self-efficacy significantly influences pregnant women's intention to attend antenatal care (K1) for dental and oral examinations. This is due to the confidence that pregnant women have in their ability to undertake dental check-ups. Pregnant women with higher self-efficacy levels are more likely to believe they can overcome challenges related to dental health check-ups, such as not experiencing difficulties in attending their first (K1) dental visit, feeling that their teeth are healthy, managing dental health issues, and having no fear of visiting a dental

clinic[18].

This finding aligns with previous study[18], who posits that increased self-efficacy arises from procedures related to cognitive processes, which are essential for forming self-efficacy. The information a person receives about the formation and development of self-efficacy depends on cognitive processes. In this process, an individual enhances their knowledge, understanding, and performs analysis and evaluation of necessary aspects to effectively complete a task.

High self-efficacy boosts pregnant women's motivation to act in accordance with their self-belief. In other words, pregnant women who believe they can maintain dental health are more likely to have a stronger intention to undergo dental check-ups and are more proactive in seeking information and advice from healthcare providers, as well as being more aware of the importance of dental examinations for themselves and their fetus. Self-efficacy (one's belief in their ability to perform an action) significantly impacts motivation to engage in desired behaviors.

According to Ajzen[4], intention to behave can predict an individual's likelihood of performing or not performing a particular behavior. The stronger the intention to behave, the more likely it is that the behavior will be realized.In line with the study by Widya[21], pregnant women's belief in their ability to organize and perform necessary actions during pregnancy is reflected in their intention to seek dental health check-ups. Without strong self-efficacy, the intention to undergo dental and oral examinations may be impeded.

Study explains self-efficacy as the confidence of pregnant women in organizing and implementing the necessary actions to achieve certain levels of accomplishment. The stronger the self-efficacy, the greater the effort pregnant women will make to obtain and maintain the efforts needed to sustain and improve health behaviors[18].

The Impact of Outcome Expectancies on Pregnant Women's Intent to Seek Dental Health Examinations

Outcome expectancies refer to the beliefs pregnant women hold about the consequences or expected results of specific actions. These expectations play a crucial role in influencing pregnant women's intention to undergo dental and oral health examinations and are an important component in bridging the gap between intention and health behavior.

Statistical tests conducted on both the treatment and control groups revealed that outcome expectancies do not significantly affect the intention to participate in antenatal care (K1) for dental and oral examinations. This condition arises because pregnant women who do not maintain their dental health before and during pregnancy may not recognize the benefits of dental and oral examinations, leading to outcome expectancies having no impact on their intention to seek dental care. Pregnant women may perceive that dental and oral health does not directly influence fetal health, thus feeling less motivated to have their teeth examined[5].

This finding contrasts with Pakpahan[5], who argue that an individual's motivation to enact behavior is enhanced when they have complete control over that intention. The strength of perceived control depends on the resources available to the individual and the opportunities they have, including financial resources and skills, as well as time. This concept of individual control over perceived behavior is referred to as "Perceived Behavioral Control" in the Theory of Planned Behavior, which is assumed to play a significant role in the emergence of behavioral intentions[4]. Previous experiences or personal beliefs about dental care can also affect a pregnant woman's intention. If a pregnant woman has had negative experiences with dental care or feels uncomfortable, this can impact her motivation, even if her outcome expectancies are positive.

The Impact of Risk Perception on Pregnant Women's Intention to Seek Dental Health Examinations

Risk perception refers to how pregnant women assess and understand the risks associated with their dental and oral health. In this context, the Health Action Process Approach (HAPA) is a health psychology model that integrates cognitive and behavioral aspects to understand how pregnant women take action to improve their dental and oral health[22].

Based on statistical tests conducted on both the intervention and control groups, pregnant women's risk perception included the belief that if dental pain is not addressed promptly, it will worsen and make them more susceptible to dental diseases. After the intervention, pregnant women increasingly recognized that dental diseases could lead to difficulties sleeping.

Statistical results indicated that there was no significant effect of risk perception on the intention to undergo antenatal care (K1) dental and oral examinations in either the intervention or control group. This condition is attributed to the lack of risk perception among pregnant women regarding their dental and oral health and that of their fetus. Initially, they did not perceive that untreated dental pain would lead to worsening conditions and higher susceptibility to dental diseases. After the intervention, awareness increased regarding the risks associated with dental disease, such as difficulties sleeping. This awareness could enhance their intention to seek dental health examinations to ensure they take necessary measures to maintain oral health during pregnancy, thereby preventing low birth weight or preeclampsia. Pregnant women with a higher risk perception of dental health risks are more motivated to undergo routine examinations.

These findings align with Julianti[22], which suggests that implementing self-management strategies to avoid stress sources requires appropriate attention and intervention to improve the well-being of pregnant women and their fetuses. Risk perception plays a crucial role in the initial motivational phase of the HAPA model, where individuals evaluate risks and benefits before deciding to change behavior.

According to the Health Belief Model (HBM), if individuals believe that a condition could potentially lead to serious consequences (perceived severity), they are more likely to take actions they believe will reduce the risk. This is consistent with the assertion that increasing perceived severity can effectively influence preventive behavior related to oral health[13].

Factors Influencing Pregnant Women's Intent to Undergo Antenatal Care (K1) for Dental and Oral Examinations

Based on multiple regression modeling, only one independent variable significantly influenced the dependent variable (Pregnant Women's Intent), which is the variable of Self-Efficacy. This condition is due to the fact that pregnant women with high self-efficacy are more likely to intend to attend antenatal care (K1) for dental and oral examinations and believe that they can overcome any obstacles. If a pregnant woman makes the visit, she will be motivated despite facing some difficulties, such as lack of knowledge and awareness, anxiety, or negative experiences during dental visits. Overcoming these challenges further motivates the pregnant woman, boosting her self-confidence and encouraging her to continue with the necessary action, which is attending antenatal care (K1) for dental and oral examinations.

According to previous study, changing a person's health behavior is considered a challenging process of self-regulation. After committing to a goal, individuals need to prepare for action and then maintain the change despite setbacks. Therefore, goal setting and goal pursuit can be understood as two distinct processes requiring self-regulation efforts[5].

Once intent is formed, the volitional phase begins. When someone is inclined to

adopt a particular health behavior, "good intentions" must be translated into detailed instructions on how to carry out the desired action. Once an action has been initiated, it must be sustained. This involves self-regulatory beliefs, skills, and strategies such as planning, coping self-efficacy, and recovery self-efficacy.

Self-efficacy describes an individual's belief in their ability to exert control over challenging demands and their own functioning. Self-confidence is crucial at all stages of the health behavior change process (Bandura, 1997), although it is not always the same construct. Its meaning depends on the specific situation of the individual, who may be more or less advanced in the process of change.

The rationale behind the differentiation of various phases of self-efficacy beliefs is that, during health behavior change, different tasks must be mastered, and different types of self-efficacy beliefs are needed to successfully accomplish these tasks. For example, someone might be confident in their general ability to engage in physical activity (i.e., high action self-efficacy), but may not be as confident in continuing physical activity after a setback (i.e., low recovery self-efficacy). In the Health Action Process Approach (HAPA), three types of self-efficacy are distinguished: action self-efficacy, maintenance self-efficacy, and recovery self-efficacy[4].

Action self-efficacy (also known as preaction self-efficacy or task self-efficacy) refers to the first phase of the process, where an individual has not yet acted but is developing the motivation to do so. This is an optimistic belief during the preactional phase. Individuals with high self-efficacy imagine success, anticipate potential outcomes from various strategies, and are more likely to initiate new behaviors. Those with less confidence imagine failure, harbor self-doubt, and tend to procrastinate in making behavioral changes[23].

The influence of self-efficacy on pregnant women's intent to undergo Antenatal Care (K1) for dental and oral examinations will be well-implemented if there is support from healthcare providers at Puskesmas or other healthcare facilities. In line with the Ministry of Health Regulation[24], cross-program collaboration between the Maternal and Child Health (MCH) department and the Dental and Oral Health department is a significant factor influencing the oral health of pregnant women. The MCH department, a core activity of Puskesmas, is not only responsible for early detection and recording of any abnormalities, cases, or complaints in the hard and soft tissues of the oral cavity of pregnant women but also for providing referral efforts to the Dental and Oral Health Service. The Oral Health Department offers dental and oral health services.

CONCLUSION AND RECOMMENDATION

This study concludes that, in both the treatment and control groups, factors such as age, occupation, education, outcome expectancies, and risk perception do not influence pregnant women's intention to attend antenatal care (K1) for dental and oral examinations. However, the factor of self-efficacy does have an effect on the intention to participate in antenatal care (K1) dental and oral examinations. In the treatment group, factors that support the emergence of intention to attend antenatal care (K1) for dental and oral examinations include maternal training and the use of applications by both pregnant women and community health workers.

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