



# Mother's Behavior in Conducting Visual Inspection with Acetic Acid

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**Abstract.** Cervical cancer is a health issue for women worldwide, with an incidence rate of 6.6% and a mortality rate of 7.5%, particularly in poor and developing countries. The incident is related to the mother's behavior in efforts to prevent cervical cancer, such as the delay in undergoing cancer screening through visual inspection with acetic acid. Research objective: to understand the relationship between knowledge and attitudes towards maternal behavior, as well as the barriers mothers face in conducting visual inspection with acetic acid. Research method: this research design uses a mixed method approach. The quantitative approach employs a cross-sectional design, while the qualitative approach is a case study that involves semi-structured interviews. Research findings: there is a relationship between knowledge and mothers' behavior in conducting visual inspection with acetic acid. There is a relationship between attitudes and mothers' behavior in conducting visual inspection with acetic acid. As many as 74.5% of mothers do not perform visual inspection with acetic acid due to barriers such as lack of intention, insufficient knowledge, and lack of information about the examination. Conclusion: there is a significant relationship between mothers' knowledge and attitudes towards behavior in conducting visual inspection with acetic acid. The lack of information as a confounding variable that most significantly influences maternal behavior. Most mothers do not perform visual inspection with acetic acid due to obstacles such as lack of intention, insufficient knowledge, and not receiving information.

**Keywords:** Behavior, knowledge, attitude, visual inspection of acetic acid.

## 1. INTRODUCTION

Cervical cancer is a major health issue for women worldwide, causing not only pain but also death. The Global Burden of Cancer (GLOBOCAN) 2018 states that cervical cancer is the most common type of cancer affecting women and can lead to death with an incidence rate of 6.6% and a mortality rate of 7.5%. According to the International Agency for Research on Cancer (IARC), in 2012, approximately 14% of new cervical cancer cases and 6.8% of cervical cancer deaths were found, particularly in low- and middle-income countries. The high mortality rate due to cervical cancer is related to delays in treatment. These treatment delays are associated with women's behaviors in efforts to prevent cervical cancer, such as postponing cancer screenings and a lack of information available to women regarding cervical cancer prevention [1]. Women infected with cervical cancer are mostly detected when the disease is already in an advanced stage, making it very unlikely to be cured. There are many factors that hinder women in their efforts to prevent cervical cancer, as other studies have indicated that a lack of knowledge among mothers is a barrier in the prevention of cervical cancer, including limited understanding of cervical cancer, cancer screening, and HPV vaccination [2]. Lack of knowledge will affect women's attitudes towards cervical cancer prevention efforts. Conversely, good knowledge will foster a positive and good attitude towards prevention efforts as an evaluation of matters related to cervical cancer to avoid the disease.

In addition to knowledge, there are cultural factors as an obstacle in women to carry out early detection and there is a belief that women have a low risk of cervical cancer infection [3]. This is also supported by the results of research that states that women tend to feel embarrassed when they are going to do an Acetic Acid (IVA) Visual

Inspection examination. Because it is related to the method of examination that requires opening the female intimate parts. So many women refuse to be examined, another reason is because the examination is carried out by a male doctor [1]. The culture of an area is inseparable from the environment of the area. The environment has an influence on the habits that women do. The results of the study prove that environmental influences will shape women's behavior in preventing cervical cancer [4]. A person's age can affect behavior in performing a visual inspection of acetic acid. According to research, older women do not want services from health workers with younger ages. They prefer or are more comfortable if the examination is carried out by a health worker who is the same age or older than them because they are considered more experienced in conducting the examination [1].

Most of the mother's behavior shows unwillingness to do a visual inspection of acetic acid. This is due to the lack of information received by mothers both about the benefits, disadvantages, the process of visual inspection of acetic acid and the impact of not doing a visual inspection of acetic acid as a prevention of cervical cancer. There is a fear of examination results and a lack of socialization about the benefits of the test. The lack of information obtained is related to the support of health workers. The absence of counseling carried out by health workers is due to the limited educational materials and the unavailability of facilities from local health services [5]. The lack of information regarding the visual inspection examination of acetic acid is greatly influenced by the level of education of women. In a study, it was proven that a person's higher education will make it easier in terms of finding out information. The results of the study also suggest that women with low educational status tend to be more at risk of HPV infection compared to women with higher education [6].

Regardless of educational status, a person's economic condition will also affect the behavior of the mother in conducting a visual inspection of acetic acid. Insufficient family income will make mothers think about not doing a visual inspection of acetic acid. This is due to the high cost of examinations. Apart from the expensive cost of examinations, the distance from home to distant health services will also be an obstacle for mothers to carry out visual inspection examinations for acetic acid. Because not all mothers have transportation facilities that will have an impact on cost expenditure [7]. Access to health facilities is still an obstacle for most women. This is in line with the results of the study which stated that women with residential locations that are difficult to reach by means of transportation will feel constrained to get services and carry out visual inspection of acetic acid [1].

## 2. METHODS

This research is a quantitative dominant mixed research method. The quantitative approach used is cross sectional, while in qualitative research by way of case studies. The sample in this study was 106 mothers aged 30-49 years who visited the Jetis I Health Center, Banguntapan II Health Center, Kretek Health Center and Pajangan Health Center of Bantul Regency. The sampling technique is purposive sampling based on consideration of inclusion and exclusion criteria. Quantitative data collection was carried out on 106 mothers aged 30-49 years by filling out a questionnaire that had been tested for validity and reliability. The qualitative data collection was carried out with semi-structured interviews using interview guidelines for 23 mothers aged 30-49 years who had completed the questionnaire.

## 3. RESULTS AND DISCUSSION

### 3.1 Responder Characteristics

**Table 1.** Frequency Distribution of Respondent Characteristics

No.	Characteristics Respondent	Frequency	Percentage
1.	<b>Mother's age</b>		
	a. 30-40 years old	55	51,9%
	b. 41-49 years old	51	48,1%
2.	<b>Education</b>		
	a. Low	35	33%
	b. Tall	71	67%
3.	<b>Work</b>		

	a. Not working	67	63,2%
	b. Work	39	36,8%
4.	<b>Age of first marriage</b>		
	a. 16-19 years old	22	20,8%
	b. $\geq 20$ years	84	79,2%
5.	<b>Number of children</b>		
	a. 1-3 children	102	96,2%
	b. $>3$ children	4	3,8%
6.	<b>History of contraception</b>		
	a. Non hormonal	36	34%
	b. Hormonal	70	66%
7.	<b>Income</b>		
	a. $<UMR$	64	60,4%
	b. DEATH	23	21,7%
	c. $>UMR$	19	17,9%

Based on table 1 about the characteristics of respondents, it can be seen in the age category that the age range of 30-40 years and 41-49 years has almost the same frequency, namely 55 mothers aged 30-40 years (51.9%), while mothers aged 41-49 years there are 51 mothers (48.1%). In the education category, the results showed that most of the mothers with higher education were 71 mothers (67%), and mothers with low education were 35 mothers (33%). Based on the occupational category, it was found that mothers who did not work dominated as many as 67 mothers (63.2%), while mothers who worked were much less at 39 mothers (36.8%). From the results of the age category of first marriage, it was found that most mothers married at the age of  $\geq 20$  years as many as 84 mothers (79.2%), while mothers who married at the age of 16-20 years were much less, namely 22 mothers (20.8%). Based on the category of the number of children, it was found that most mothers had 1-3 children, as many as 102 mothers (96.2%), there were only 4 mothers (3.8%) who had children  $> 3$ . In the contraceptive history category, the most dominating results in the use of hormonal contraceptives were obtained by 70 mothers (66%), while the history of non-hormonal contraceptives was less, namely 36 mothers (34%). Furthermore, in the income category, most mothers have an income  $<UMR$ , which is 64 mothers (60.4%), there are 23 mothers (21.7%) with income according to the UMR, only 19 mothers (17.9%) have an income  $>UMR$ .

**Table 2.** Mother's Behavior in Conducting Visual Inspection of Acetic Acid

No.	Variable	Frequency	Percentage
1.	Knowledge		
	a. Low	58	54,7%
	b. Tall	48	45,3%
2.	Attitude		
	a. Negative	66	62,3%
	b. Positive	40	37,7%
3.	Behaviour		
	a. Not doing	79	74,5%
	b. Do	27	25,5%

Based on table 2 about the knowledge, attitude and behavior of mothers in conducting visual inspection of acetic acid, it shows that a large number of mothers have low knowledge about visual inspection of acetic acid as many as 58 mothers (54.7%), while mothers with high knowledge about visual inspection of acetic acid are 48 mothers (45.3%). In line with the results of other studies that say that the general public still has low knowledge regarding cervical cancer and cancer screening through acetic acid visual inspection examination [8]. Just like the results of other studies that state that the incidence of low health literacy is still widely found in the community. This results

in limited knowledge about the importance of cervical cancer prevention and is one of the obstacles for women to carry out a visual inspection of acetic acid [9]. More than half of women have never heard of cervical cancer and do not know the purpose or benefits of a visual inspection of acetic acid [10].

Maternal attitudes towards acetic acid visual inspection showed that most mothers had a negative attitude regarding the acetic acid visual inspection examination as many as 66 mothers (62.3%), while mothers who had a positive attitude about the acetic acid visual inspection examination were 40 mothers (37.7%). Some of them believe that by implementing a healthy lifestyle, it is enough to make the body avoid cervical cancer. For them no examination is required [11]. A negative attitude or not accepting that a visual inspection of acetic acid needs to be done, illustrates that the woman has negative thoughts towards the examination. They think that if someone conducts an examination, it means that the person has carried out deviant sexual activities and has many sexual partners [12].

The behavior of mothers in conducting visual inspection of acetic acid showed that most of the mothers behaved without performing visual inspection of acetic acid as many as 79 mothers (74.5%), while mothers who behaved did visual inspection of acetic acid as many as 27 mothers (25.5%). Women who have known the benefits of cervical cancer screening and acetic acid visual inspection are 3 times more likely to behave more obediently and routinely in performing acetic acid visual inspection examinations [10]. In another study, health-conscious behavior was related to how often a woman made visits to health services. The more often it is, the more health information will be obtained, especially about the benefits of acetic acid visual inspection examination, and the more knowledge about cervical cancer prevention [13].

### 3.2 Bivariate Analysis

**Table 3. The Relationship of Knowledge and Attitude to Mother's Behavior in Conducting Visual Inspection of Acetic Acid**

Independent variables	Mother's Behavior				Sum	P
	Not doing		Do			
	F	%	F	%		
<b>Knowledge</b>						
a. Low	50	47,1%	8	7,6%	54,7%	0,002
b. Tall	29	27,3%	19	18%	45,3%	
<b>Attitude</b>						
a. Negative	57	54%	9	8,4%	62,4%	0,000
b. Positive	22	20,7%	18	16,9%	37,6%	

Based on table 3, it shows that mothers with low knowledge who do not have a visual inspection of acetic acid are 50 mothers (47.1%), while mothers with low knowledge who do visual inspection of acetic acid are 8 mothers (7.6%). Mothers with high knowledge who did not carry out visual inspection of acetic acid were 29 mothers (27.3%), while mothers with high knowledge who carried out visual inspection of acetic acid were 19 mothers (18%). The results of the chi-square test showed a p-value of  $0.002 < 0.05$  so it can be concluded that  $H_a$  was accepted. This shows that there is a relationship between knowledge and maternal behavior on visual inspection of acetic acid in Bantul Regency. Lack of knowledge is also associated with a person's level of education. Highly knowledgeable mothers will behave in a healthy lifestyle and prevent the onset of a disease, in this case preventing cervical cancer by conducting a visual inspection of acetic acid. A person with a higher education will be better able to seek information about health and can accept if advised to do early detection of cervical cancer through a visual inspection examination of acetic acid [14]. The same results were also found in a study that lower levels of education will make mothers less likely to have screenings to prevent cervical cancer [15].

Based on the attitude variable, it was shown that mothers with a negative attitude did not carry out a visual inspection of acetic acid as many as 57 mothers (54%), while mothers with a negative attitude who carried out a visual inspection of acetic acid were 9 mothers (8.4%). Mothers with a positive attitude who did not carry out a visual inspection examination of acetic acid were 22 mothers (20.7%), while mothers with a positive attitude who carried out a visual inspection examination of acetic acid were 18 mothers (16.9%). The results of the chi-square test showed a p-value of  $0.000 < 0.05$  so it can be concluded that  $H_a$  was accepted. This shows that there is a relationship between attitude and maternal behavior towards visual inspection of acetic acid in Bantul Regency.

In a study it is said that knowledge and attitudes have an influence on maternal behavior. Knowledge has an influence of 2920 times, while attitude has an influence of 2043 times on maternal behavior in screening for cervical cancer through visual inspection of acetic acid [7]. Previous research also said that knowledge and attitudes determine how mothers' behavior in understanding a disease prevention effort is very important to do, especially cervical cancer [16]. Mother's knowledge and attitude towards acetic acid visual inspection examination are 2 factors that are interrelated and affect maternal behavior. It is evident in the results of this study that there are still many mothers who do not do a visual inspection of acetic acid, which means that there are still many mothers who do not know the importance of doing an examination. Similar to the negative attitude of mothers, there are still many mothers who do not receive a visual inspection examination of acetic acid for various reasons.

**Table 4. Relationship of Age, Education, Information and Access to Health Services to Maternal Behavior in Conducting Visual Inspection of Acetic Acid**

Variable <i>confounding</i>	Mother's Behavior				Sum	P
	Not doing		Do			
	F	%	F	%		
<b>Mother's age</b>						
a. 30-40 years old	42	39,6%	13	12,2%	51,8%	0,652
b. 41-49 years old	37	35%	14	13,2%	48,2%	
<b>Education</b>						
a. Low	27	25,5%	8	7,5%	33%	0,664
b. Tall	52	49%	19	18%	67%	
<b>Information</b>						
a. No information	33	31,1%	3	3%	34,1%	0,004
b. There is information	46	43,3%	24	22,6%	65,9%	
<b>Access to healthcare services</b>						
a. No difficulty	46	43,3%	15	14,2%	57,5%	0,808
b. Difficulty	33	31,1%	12	11,4%	42,5%	

Based on table 4, the results show that the information variable has a meaningful relationship with the behavior of mothers in conducting visual inspection of acetic acid with a p-value of less than 0.05. Mothers who said there was no information about the acetic acid visual inspection examination were more dominant in not doing the examination as many as 33 mothers (31.1%), while mothers who said there was no information about the visual inspection examination of acetic acid but did the examination as many as 3 mothers (3%). Mothers who said there was information about the visual inspection examination of acetic acid were also more dominant not to do the examination as many as 46 mothers (43.3%), while mothers who said there was information about the visual inspection examination of acetic acid and carried out the examination as many as 24 mothers (22.6%). The results of the chi square test on the information variable obtained a p-value of 0.004 which means that the information variable has a meaningful relationship with the mother's behavior in conducting a visual inspection of acetic acid. Statistically, the variables of age, education and access to health services have a p-value greater than 0.05. It can be concluded that the variables of age, education and access to health services do not have a meaningful relationship with maternal behavior in conducting visual inspection of acetic acid. Mothers in the age category of 30-40 years are more dominant in not conducting visual inspection of acetic acid as many as 42 mothers (39.6%), while mothers in the age category of 30-40 years who do visual inspection of acetic acid are much less, namely 13 mothers (12.2%). In the 41-49-year age category, the majority of mothers did not conduct a visual inspection of acetic acid as many as 37 mothers (35%), while mothers in the age category of 41-49 years who carried out a visual inspection examination of acetic acid were 14 mothers (13.2%). The results of the chi square test on the age variable obtained a p-value of 0.652 which means that the age variable is not related to the behavior of the mother in conducting a visual inspection of acetic acid.

Mothers with a lower education category did not have a visual inspection of acetic acid as many as 27 mothers (25.5%), while mothers in the lower education category did not carry out a visual inspection examination of acetic

acid less, namely 8 mothers (7.5%). Mothers in the higher education category also did not conduct a visual inspection of acetic acid as many as 52 mothers (49%), while mothers in the higher education category who carried out visual inspection of acetic acid were 19 mothers (18%). The results of the chi square test on the educational variable obtained a p-value of 0.664 which means that the educational variable is not related to the behavior of the mother in conducting a visual inspection of acetic acid.

Mothers with no difficulties in accessing health services were more dominant in not having an acetic acid visual inspection examination as many as 46 mothers (43.3%), while mothers with no difficulties in accessing health services who carried out acetic acid visual inspection examination were 15 mothers (14.2%). Mothers with difficulties in accessing health services were also more dominant in not conducting visual inspection of acetic acid as many as 33 mothers (31.1%), while mothers with difficulties in accessing health services were 12 mothers (11.4%). The results of the chi square test on the health service access variable obtained a p-value of 0.808 which means that the health service access variable is not related to the behavior of mothers in conducting a visual inspection of acetic acid.

### 3.3 Multivariate Analysis

**Table 5. Results of Logistic Regression of Knowledge, Attitudes and Information on Maternal Behavior**

Variable	Model 1 Exp(B) (95% C.I)	Model 2 Exp(B) (95% C.I)	Model 3 Exp(B) (95% C.I)	Model 4 Exp(B) (95% C.I)
Knowledge	4,09 (1,59-10,52)	-	3,73 (1,38-10,08)	3,68 (1,32-10,26)
Attitude		5,18 (2,02-13,25)	4,78 (1,80-12,69)	4,15 (1,51-11,38)
Information				4,72 (1,22-18,28)
Pseudo R2	0,12	0,16	0,25	0,32

Based on table 5, the results of logistic regression analysis on the variables of knowledge, attitudes and information on maternal behavior in conducting a visual inspection of acetic acid are shown. Model 1 is the result of an analysis between knowledge variables on maternal behavior in conducting a visual inspection of acetic acid. The results of the analysis showed a Pseudo R2 value of 0.124 which means that the knowledge variable contributed as much as 12.4% to the mother's behavior in conducting a visual inspection of acetic acid. Meanwhile, the remaining 87.6% was influenced by other variables.

Model 2 is the result of an analysis between attitude variables to maternal behavior in conducting a visual inspection of acetic acid. The results of the analysis showed a Pseudo R2 value of 0.166 which means that the variable of attitude contributed as much as 16.6% to the behavior of mothers in conducting a visual inspection of acetic acid. While the remaining 83.4% is influenced by other variables.

Model 3 is the result of an analysis between the variables of knowledge and attitudes towards maternal behavior in conducting a visual inspection of acetic acid. The results of the analysis showed a Pseudo R2 value of 0.252 which means that knowledge and attitude contributed 25% to the mother's behavior in conducting a visual inspection of acetic acid. While the remaining 75% is influenced by other variables.

Model 4 is the result of an analysis between the variables of knowledge, attitudes and information on maternal behavior in conducting a visual inspection of acetic acid. The results of the analysis showed a Pseudo R2 value of 0.322 which means that knowledge, attitude and information contributed 32% to the mother's behavior in conducting a visual inspection of acetic acid. While the remaining 68% is influenced by other variables.

The selection of the model was carried out based on a higher Pseudo R2 value, namely in model 4 with a Pseudo R2 value of 0.322. Knowledge has an Exp(B) value of 3.68 (95% CI 1.32 - 10.26) so that it can be interpreted that knowledge has a 3.68 chance of influencing maternal behavior in conducting a visual inspection of acetic acid. The results of the analysis on the attitude variable obtained an Exp(B) value of 4.15 (CI 95% 1.51 - 11.38) so that it can be interpreted that attitude has a chance of influencing maternal behavior 4.15 times in conducting a visual inspection of acetic acid. In the information variable, an Exp(B) value of 4.72 (CI 95% 1.22 - 18.28) was obtained, so it can be interpreted that the information has a chance of influencing the mother's behavior in conducting a visual inspection of acetic acid.

### 3.4 Qualitative findings

From the results of semi-structured interviews with 23 informants, 14 mothers who have not undergone a visual inspection of acetic acid and 9 mothers who have undergone a visual inspection of acetic acid. It was found that 2 themes in mothers who have not done a visual inspection of acetic acid consist of internal obstacles and external obstacles. In mothers who have carried out a visual inspection of acetic acid, 2 themes were also found, namely internal motivation and external motivation.

#### a. Internal obstacles

##### 1) No intention

Most of the informants who do not do a visual inspection examination of acetic acid have obstacles in themselves. They said there was no intention to conduct a visual inspection of acetic acid, as evidenced by the informant's statement:

"..... There is no intention yet. I have heard about the iva from Mr. Dukuh, there are from the Health Office who came.... But yo there is no intention from the heart yet.... Yo, I'm not embarrassed, I'm not afraid, I just don't have any intentions....." (If8).

"I mean I'm not really interested in checking the iva. ....There is no intention yet, I am not aware of it myself, heheh" (If21).

Visual inspection of acetic acid is not a priority for some women in maintaining health and preventing cervical cancer. Some women say they have no intention of getting tested not because they don't know the benefits of a visual inspection of acetic acid, but because they don't feel like they want to get tested and it's not a top priority [17]. This is also reinforced by other studies that say that cervical cancer screening is not a priority for them, citing other health problems. So women prefer to do other health checks that are considered more important [18]. Indirectly, there is no intention to conduct an examination is a form of rejection from the mother. As many as 15% of women refuse to be screened to prevent cervical cancer [19]. Not only did they reject, they also disliked cancer screening screening methods such as visual inspection of acetic acid. In another study, women who did not intend to do cancer screening through a visual inspection examination of acetic acid were due to a negative attitude. Negative attitudes in this case such as beliefs or superstitions about cervical cancer and misunderstandings about the benefits of acetic acid visual inspection examination [20]. There is no intention to conduct a visual inspection of acetic acid, which is definitely closely related to the negative attitude of the mother. As stated in the results of this study, most mothers have a negative attitude. This negative attitude automatically affects the mother's behavior. Although they already know the benefits of acetic acid visual inspection examination as an early detection of cervical cancer prevention, it does not make mothers accept the importance of the examination.

##### 2) Lack of knowledge

Another form of internal resistance for mothers is still lack of knowledge related to visual inspection of acetic acid. This is evidenced by the statement of the informant:

"..... I have heard of cervical cancer; you can get it from the media. But if I don't know, I've never heard of it....." (If9).

"I also don't understand that iva... emm I don't understand yet, I don't understand" (If10).

Women's lack of knowledge about the benefits of acetic acid visual inspection examination and women's ignorance of cervical cancer risk factors, resulted in women feeling unnecessary to do the examination. Most women reveal that they feel they don't need to be checked because they feel they are fine without any complaints. The adverse impact of limited knowledge about acetic acid visual inspection is that women believe and have a perception that acetic acid visual inspection is necessary if a person is already sick or has complaints about the female genital area [21]. Women with less knowledge are 7 times more likely not to find out about their health problems [22]. Women who claimed not knowing when it was appropriate or at what age to get tested, 73% were less likely to have a checkup [15]. Another reason women do not get tested is because they have never known about cervical cancer screening programs [23]. As a result of limited knowledge, there are negative effects such as the emergence of the perception that a woman's

ovaries will be damaged if cervical cancer screening is carried out. Some of them thought that health workers would remove the ovaries while the examination process was underway [18].

3) Fear

Another informant's confession related to the obstacle of not conducting a visual inspection of acetic acid was due to fear, both from the examination method and the results of the examination. As the following informant said:

Eee, I'm just afraid of this, he eh. I'm afraid the problem is that the genitals are here. Just be horrified, don't imagine it (If 3).

If I check, I'm still scared, emm I'm afraid of the result later (If 12).

I'm still afraid that I want to check. Yoo is afraid that there will be various diseases (If 23).

Based on the results of in-depth interviews, the informant reasoned not to conduct a visual inspection of acetic acid because of fear. Women refuse to be examined because of fear, fear if the test results are positive and carry cervical cancer [24]. Women's fear of cervical cancer is due to the experience of people around them who have died from cervical cancer. They believe that not doing a visual inspection of acetic acid is the best decision to avoid knowing about cancer. A woman's admission that her mind will be calmer if she does not know about a disease [17]. Women will feel better if they don't have an examination, feel that their lives will be calmer if they don't know that cervical cancer is in them [25]. Women will be freer in living their lives if they do not know that cervical cancer is attacking them. Another consideration is that women avoid being tested, fearing that if they know a positive test result, it will increase the economic burden. For women with low economic status, they feel they don't have money for further treatment. Another confession, in addition to being afraid of knowing the results of the examination, women also feel that the examination procedure will make them feel pain [14]. Fear and negative feelings will continue to emerge from their experiences that say that screening for cervical cancer makes them feel uncomfortable and painful [12]. These are the underlying reasons why women are afraid to do a visual inspection of acetic acid. The appearance of fear is caused by the mother's negative perception of cervical cancer. Fear of the examination method and examination results is a reflection of the mother's attitude of not accepting that the examination needs to be carried out. If the mother has good awareness and has good knowledge, of course, it can minimize negative perceptions related to the visual inspection of acetic acid. So there is a possibility to be able to receive a visual inspection examination of acetic acid as an effort by mothers to prevent cervical cancer.

4) No time

Other complaints such as not having time to conduct a visual inspection of acetic acid were also expressed by the informant as follows:

There is no time to check it yet, heheh I haven't had time to do it (If 19).

I haven't had a chance to check it yet. Actually, you need to check it, it's just that you haven't had time (If 21).

Researchers found that some informants admitted that they did not have time to do a visual inspection of acetic acid. In society, women are entrusted to do all housework independently, and it has become a responsibility that must be carried out [26]. Meanwhile, the matter of earning a living is the husband's obligation. It can be said that all of women's time is spent taking care of housework, so most women feel that they don't have more time for themselves even to do a visual inspection of acetic acid which is considered to be taking up their time. In line with the results of other studies, some women tend to refuse to attend a visual inspection of acetic acid because they feel that they do not have enough time and there are other more important activities [17]. In contrast to the results of other studies that say that women with an older age or more than 30 years have a greater chance of having a visual inspection of acetic acid [15]. Women aged 35-49 years are more likely to have the examination compared to women aged 15-24 years [27]. Women with older ages are likely to have more time to have visual inspection checks compared to younger ages. The statement from the results of the study is not in accordance with the results in this study, that age has no influence on maternal behavior. Mothers who state that they do not have time to do the examination can be caused by a lack of knowledge and a negative attitude of the mother so that the visual inspection of acetic acid is not a priority.

5) No complaints



Furthermore, some informants said that they did not have any complaints so they did not conduct a visual inspection of acetic acid. As revealed by the following informant:

I have never checked that because I feel fine. There don't seem to be any signs, anything, complaints about femininity or the uterus (If 4).

There are no complaints. EMM not yet an MBA. There have been no complaints (If 10).

Some women feel that they are healthy and have no complaints related to the female organs or other complaints. The condition that is considered healthy makes them think it is unnecessary to do cervical cancer prevention through a visual inspection examination of acetic acid. The same thing was also mentioned in another study that women did not attend cervical cancer screening because they felt they were healthy and had no complaints at all. It is a habit for a person to come to a health service if he is sick and already has health complaints [28]. Most of the women who revealed that they were healthy and had no health complaints reflected a negative attitude as stated by researchers in the results of a quantitative study that there are still many mothers who have a negative attitude by not receiving a visual inspection examination of acetic acid. This is also supported by the idea that they do not have a risk of cervical cancer and simply by implementing a healthy lifestyle they will avoid health problems. The majority of women who do not have a visual inspection of acetic acid due to the thought of a good health condition, do not feel serious symptoms related to a disease [25]. Conditions that are considered healthy are the reason why women do not do a visual inspection of acetic acid. They will visit hospitals or other health service centers if there are complaints or are in a sick condition. Expressions about good health conditions are indeed clearly seen in people's lives. It has become a habit in the community in general not to make the best use of health facilities. Many things can be the trigger why someone does not do disease prevention. Apart from thinking about good health conditions, it is also caused by a lack of awareness to prevent diseases. Feeling that there are no complaints about a health condition reflects an attitude of not accepting which ultimately forms a behavior that disease prevention is not necessary, in this case preventing the occurrence of cervical cancer through a visual inspection examination of acetic acid.

6) Ashamed

Some informants also said they were embarrassed if they had to do a visual inspection of acetic acid. As the following informant stated:

Then I feel embarrassed if I check that, eh. Then finally yo didn't check it before (If 4).

It's embarrassing to check that. I never asked. It's a shame that you want to check in such a way (If 23).

The confession of several informants revealed that their obstacle was not to carry out a visual inspection of acetic acid, one of which was because they felt embarrassed by the examination method that required to open the female intimate parts. In accordance with the results of research in rural China, that women are embarrassed and reluctant to do a visual inspection of acetic acid because they have to show their female organs [25]. They are not used to having intimate parts to be seen by others and it is inappropriate to do it because it is contrary to the cultural norms of rural Chinese women.

Shame over the examination method is not only experienced by women from China, almost all regions experience the same thing, especially at the research site. Considering that women at the research site really apply a culture of shame and tend to feel taboo with things related to female organs. So it is not surprising that many informants refuse to be examined. In line with research that has been conducted in Romania and Bulgaria, that female inhibitors carry out visual inspection of acetic acid, one of which is because of the embarrassment of having to be examined [28]. In addition to embarrassment, it is also due to discomfort with the examination method.

In another study, the same results were also obtained that women felt embarrassed if a visual inspection of acetic acid was carried out. For some people, especially women, they feel that the examination method is not something that is commonplace if it is carried out. They feel safer if they do not participate in a visual inspection of acetic acid [29]. The embarrassment experienced by the mother occurred because the mother did not know more clearly about the benefits of the examination. Triggered by the negative attitude of the mother so that the mother is not willing and embarrassed to do the examination.

7) Unable to make decisions

Some informants also mentioned that they could not make a decision to conduct a visual inspection of acetic acid. This is evidenced by the statement of the informant:

"If you check, yes, ask the father first. Later, I will ask the father first" (If13).

Another obstacle that triggers mothers not to do visual inspection of acetic acid is because mothers cannot make their own decisions without the consent of their husbands. The mother admitted that she had to get permission from her husband first if she wanted to do something, including a visual inspection of acetic acid. This opinion is also supported by other studies that husbands or families have a role in making choices in the form of decisions regarding maternal health, including the prevention of cervical cancer through visual inspection of acetic acid [30]. Husbands and families are obliged to motivate mothers so that they can carry out routine check-ups.

In reality, there are still many mothers who are hesitant and afraid to make the best decision for themselves. The mother considers that her husband will not agree if he knows the examination method that is considered to violate religious teachings. As with the acetic acid visual inspection method that requires the mother to open the female area, this method is not accepted by some people, especially husbands. The inability of mothers to make their own decisions is also due to a lack of knowledge about the benefits of acetic acid visual inspection examinations. This is stated in the results of a study conducted by researchers using quantitative methods that most mothers still have low knowledge about visual inspection of acetic acid.

b. External obstacles

The external obstacles experienced are in the form of limited information they obtain. The result of the informant's confession that there was no information about the visual inspection of acetic acid did not even know if the visual inspection of acetic acid was very important. This is evidenced by the statement of the informant:

"Nganu, actually, I have never had an invitation to check on you,....." (If7).

"There is no information if this previous examination was actually important....." (If10).

"I haven't been given information about this iva, yes I don't know" (If13).

Information constraints were also felt by other informants who said that information about the examination actually existed but was found out late.

"..... Yesterday when there was iva, we just found out late. The information has not been provided" (If11).

The informant further complained about the problem of unclear information received.

"I've only heard from friends, but the information is not clear....." (If10).

It was also mentioned in the results of another study that women who did not receive information related to the visual inspection examination of acetic acid indirectly had less knowledge and did not actively find out about the examination. Women who have never been informed about cervical cancer or have an acetic acid visual inspection examination are about 52 times more likely to exhibit poor health behavior [22]. In another study, women know that if they have regular health check-ups are very important, the problem is that some of them do not know about the importance of preventing cervical cancer through acetic acid visual inspection examinations.

The obstacles experienced by some women are the result of never getting information about the examination so that they do not make good use of health service facilities [31]. This is not in line with the results of other studies that say that women do not get clear information about the visual inspection of acetic acid. The lack of information received does not make them passive. Their high curiosity makes them search for information independently through the internet and magazines in the hope of increasing their knowledge about the examination [32].

## 4. CONCLUSIONS

Based on the results of research and discussions that have been carried out to determine the behavior of mothers in conducting visual inspection of acetic acid in Bantul Regency, it can be concluded as follows:

1. There is a relationship of knowledge with maternal behavior in conducting a visual inspection of acetic acid
2. There is a relationship between attitude and maternal behavior in conducting acid visual inspection
3. The existence of a confounding variable, namely the lack of information that contributes the most to the behavior of mothers in conducting visual inspection of acetic acid

4. There are obstacles for mothers not to conduct visual inspection of acetic acid in the form of internal obstacles felt by mothers, namely no intention and lack of knowledge about visual inspection of acetic acid. The external obstacle experienced by the mother is the limitation of information, in this case there is no information about the visual inspection of acetic acid obtained by the mother.

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