



Analysis of Cervical Cancer Screening Behavior in Women of Childbearing Age from the Perspective of the Health Belief Model

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Article Information

Received: April 20, 2026

Revised: June 08, 2026

Online: June 13, 2026

Keywords

Cervical Cancer Screening, Health Belief Model, Women of Reproductive Age, Health Behavior, Early Detection

ABSTRACT

Cervical cancer remains a major public health problem, particularly in developing countries where low screening coverage contributes to high morbidity and mortality among women. This study aimed to analyze cervical cancer screening behavior among women of reproductive age based on the Health Belief Model (HBM). An analytical observational study with a cross-sectional design was conducted in Padang City from January to February 2026. A total of 422 women of reproductive age were selected through simple random sampling. Cervical cancer screening was defined as having undergone at least one screening method, including Visual Inspection with Acetic Acid (VIA), Pap smear, or Human Papillomavirus (HPV) testing. Data were collected using a validated questionnaire and analyzed using Chi-square and logistic regression tests. Only 39.8% of respondents had ever undergone screening (95% CI: 35.1–44.5%). Significant associations were found between screening behavior and perceived susceptibility ($p=0.012$), perceived benefits ($p=0.001$), perceived barriers ($p<0.001$), cues to action ($p<0.001$), and self-efficacy ($p<0.001$), while perceived severity was not significantly associated ($p=0.087$). Multivariable analysis showed that perceived barriers and self-efficacy remained independently associated with screening behavior. These findings suggest that reducing perceived barriers and strengthening self-efficacy may improve cervical cancer screening uptake among women.

Keywords: Cervical Cancer Screening, Health Belief Model, Women of Reproductive Age, Health Behavior, Early Detection



INTRODUCTION

Cervical cancer remains one of the most important public health challenges among women worldwide. Globally, it is the fourth most common cancer among women, with approximately 604,000 new cases and 342,000 deaths reported in 2020 (Khabibah et al., 2022). The burden is disproportionately concentrated in developing countries where access to preventive services and screening programs remains limited (Mukti, 2021).

In Indonesia, cervical cancer continues to be a leading cause of cancer-related mortality among women. Globocan estimates reported approximately 36,633 cases, with cervical cancer accounting for 19.1% of all female cancer deaths (Zumrudah et al., 2023). Most cases are diagnosed at advanced stages, reducing treatment effectiveness and survival rates.

Furthermore, low early detection coverage is a major challenge in cervical cancer control in Indonesia. Although the government has developed various screening programs, participation among women of childbearing age in screening remains relatively low. This is due to various factors, such as limited access to services, lack of information, and social and cultural barriers (Maryati et al., 2023).

Cervical cancer not only impacts individual health but also imposes significant economic and social burdens. High medical costs and lost productivity due to the disease can place a financial burden on families and the healthcare system. Furthermore, psychological impacts such as anxiety, depression, and social stigma are also common among cervical cancer survivors, significantly impairing their quality of life.

Cervical cancer prevention efforts can be achieved through early detection using screening methods such as the Pap smear, Visual Inspection with Acetic Acid (VIA), and HPV DNA testing. Screening has been proven effective in reducing the incidence and mortality from cervical cancer because it allows the detection of precancerous lesions before they develop into invasive cancer (Maryati et al., 2023). Therefore, increasing screening coverage is a key strategy in cervical cancer control.

In Indonesia, cervical cancer screening programs have become part of national policy for promotional and preventive efforts. The VIA method is a primary choice due to its relative affordability, ease of administration, and high sensitivity and specificity of approximately 96.0% and 90.9%, respectively (Zumrudah et al., 2023). However, implementation of this program still faces various obstacles, including low public interest in routine screening.

Early detection through cervical cancer screening, including Visual Inspection with Acetic Acid (VIA), Pap smear, and HPV testing, has been proven effective in identifying precancerous lesions and reducing cervical cancer incidence and mortality (Maryati et al., 2023). Although the Indonesian government has implemented national screening programs, participation among women of reproductive age remains low due to limited access, insufficient awareness, sociocultural barriers, and individual perceptions regarding screening (Maryati et al., 2023; Mukti, 2021).

Previous studies have identified several determinants of screening behavior, including knowledge, attitudes, social support, access to health services, and health beliefs (Mukti, 2021; Dianaulina et al., 2025). However, existing evidence remains fragmented because many studies have



examined only selected determinants without comprehensively evaluating all constructs of the Health Belief Model (HBM). Furthermore, findings regarding the relative contribution of HBM constructs to screening behavior remain inconsistent across settings and populations.

In addition, evidence regarding cervical cancer screening behavior among women of reproductive age in Indonesia using a comprehensive HBM framework is still limited. Understanding how perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy collectively influence screening behavior is important for designing effective behavioral interventions.

Therefore, this study aimed to analyze cervical cancer screening behavior among women of reproductive age in Padang City using the Health Belief Model framework. The findings are expected to provide evidence for the development of theory-based health promotion interventions and policies to improve cervical cancer screening participation in Indonesia.

METHODS

This study employed a quantitative approach using an analytical observational design and a cross-sectional study design. This design was chosen to analyse the relationship between the constructs of the Health Belief Model (HBM) and cervical cancer screening behaviour among women of reproductive age (WRA) over a single observation period without any intervention from the researchers. The study was conducted in the city of Padang during the period January–February 2026. The study location was chosen because cervical cancer screening coverage in the area still needs to be improved, whilst the number of women of reproductive age available is sufficiently representative to reflect the conditions of the population under study.

The study population comprised all women of reproductive age aged 15–49 years residing in the city of Padang. Inclusion criteria included women of reproductive age who were married or had ever had sexual intercourse, were willing to participate as respondents, and were able to communicate effectively. Exclusion criteria included respondents who were suffering from a serious health condition at the time of the study or who did not complete the questionnaire in full. Sampling was carried out using probability sampling with the simple random sampling method, so that every member of the population had an equal chance of being selected as a respondent.

The sample size was determined using the Lemeshow formula for analytical research with proportion estimation, namely:

$$n = \frac{Z^2 P(1 - P)}{d^2}$$

where n is the minimum sample size, Z is 1.96 at a 95% confidence level, P is 0.50 to determine the maximum sample size, and d is 0.05 as the acceptable margin of error. Based on these calculations, the minimum sample size required was 384 respondents. To account for potential data loss or non-response, the sample size was increased by 10%, resulting in a final sample size of 422 respondents used in this study.

The dependent variable in this study is cervical cancer screening behaviour, defined as respondents who have undergone early detection screening for cervical cancer using the Visual



Inspection with Acetic Acid (VIA) method, a Pap smear, or a Human Papillomavirus (HPV) test at least once in their lifetime. This variable is categorised into two groups: those who have undergone screening and those who have never undergone screening. The independent variables consist of constructs within the Health Belief Model, namely perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. Perceived susceptibility is defined as an individual's perception of the likelihood of developing cervical cancer. Perceived severity is an individual's perception of the severity and consequences of cervical cancer. *Perceived benefits* is an individual's belief in the benefits of screening for the early detection of cervical cancer. Perceived barriers describe the obstacles individuals feel when undergoing screening, such as fear, embarrassment, cost, and limited access to healthcare services. Cues to action refer to internal or external stimuli that encourage individuals to undergo screening, such as recommendations from healthcare professionals, media exposure, family experiences, or social support. Meanwhile, self-efficacy is defined as an individual's belief in their ability to access and undergo cervical cancer screening. All independent variables were categorised as low or high based on the median score of each construct.

Data collection was carried out using a structured questionnaire designed based on the indicators of each construct of the Health Belief Model and cervical cancer screening behaviour. The research instrument comprised sections on respondent characteristics, the Health Belief Model constructs, and the history of cervical cancer screening behaviour. Prior to use, the instrument underwent validity testing using Pearson's Product-Moment correlation and reliability testing using Cronbach's Alpha. The test results indicated that all items were valid and had a Cronbach's Alpha value of ≥ 0.70 ; consequently, the instrument was deemed reliable and suitable for use in the study.

Data analysis was conducted in stages, comprising univariate, bivariate and multivariate analyses. Univariate analysis was used to describe the frequency distributions and percentages of respondents' characteristics and research variables. Bivariate analysis was performed using the Chi-square test to identify associations between each construct of the Health Belief Model and cervical cancer screening behaviour. Variables with a p-value < 0.25 in the bivariate analysis were subsequently included in a multiple logistic regression model. Multivariate analysis using multiple logistic regression was performed to determine the factors independently associated with cervical cancer screening behaviour after controlling for other variables in the model. The results of the analysis are presented in the form of Adjusted Odds Ratios (AOR), 95% Confidence Intervals (95% CI), and p-values, with the level of statistical significance set at $\alpha = 0.05$.

This study has adhered to the principles of research ethics, which include respect for the autonomy of respondents, data confidentiality, anonymity, and fairness in the conduct of the research. All respondents were provided with an explanation of the research objectives and procedures before signing the informed consent form. This study also obtained ethical approval from the Health Research Ethics Committee (the ethical approval number corresponds to the actual research document) prior to the data collection process.



RESULTS

1. Respondent Characteristics

Table 1. Distribution of Characteristics of Women of Childbearing Age (n=422)

Characteristics	Category	Frequency (n)	Percentage (%)
Age	15–24 years	98	23.2
	25–34 years	162	38.4
	35–49 years	162	38.4
Education	Low (elementary–middle school)	124	29.4
	Middle School (SMA)	198	46.9
	Higher Education (College)	100	23.7
Work	Doesn't work	176	41.7
	Work	246	58.3
Economic status	Low	158	37.4
	Intermediate	186	44.1
	High	78	18.5

The majority of respondents (76.8%) were in the productive age group (25–49 years old), a priority group for cervical cancer screening programs. The majority of respondents had a secondary education (46.9%), indicating a relatively good potential for receiving health information. However, a significant proportion of respondents with low economic status (37.4%) remained, potentially presenting a barrier to accessing screening services.

2. Distribution of Cervical Cancer Screening Behavior

Table 2. Distribution of Cervical Cancer Screening Behavior

Screening Behavior	Frequency (n)	Percentage (%)
Have you ever had screening?	168	39.8
Never screened	254	60.2

The majority of respondents (60.2%) had never been screened for cervical cancer. This indicates that early detection coverage remains low, despite the availability of screening programs. This situation indicates issues with health behaviors and individual perceptions of the importance of screening.

3. Distribution of Health Belief Model (HBM) Constructs

Table 3. Perceived Susceptibility

Category	Frequency (n)	Percentage (%)
Low	210	49.8
High	212	50.2

The distribution of perceived susceptibility was relatively balanced, but nearly half of respondents still had a low risk perception. This suggests that some women do not yet perceive themselves as at risk for cervical cancer, which may reduce their motivation to undergo screening.

Table 4. Perceived Severity

Category	Frequency (n)	Percentage (%)
Low	134	31.8
High	288	68.2

The majority of respondents had a high perception of severity (68.2%), indicating they understand the serious impact of cervical cancer. However, this high perception of severity has not been fully translated into screening.

Table 5. Perceived Benefits

Category	Frequency (n)	Percentage (%)
Low	120	28.4
High	302	71.6

The majority of respondents (71.6%) were aware of the benefits of screening. This indicates that they cognitively understand the importance of early detection, but other factors still hinder its implementation.

Table 6. Perceived Barriers

Category	Frequency (n)	Percentage (%)
Low	156	37.0
High	266	63.0

The majority of respondents (63.0%) experienced significant barriers, such as fear, embarrassment, cost, and limited access to services. These factors were the main determinants of low screening behavior.

Table 7. Cues to Action

Category	Frequency (n)	Percentage (%)
Low	182	43.1
High	240	56.9

More than half of respondents (56.9%) had positive cues to action, such as information from health professionals or the media. However, a significant proportion still lacked incentives to undergo screening.

Table 8. Self-Efficacy

Category	Frequency (n)	Percentage (%)
Low	170	40.3
High	252	59.7



The majority of respondents had high self-efficacy (59.7%), indicating confidence in their ability to perform screening. However, 40.3% of respondents still had low self-efficacy, which could potentially hinder effective action.

The following is a bivariate analysis using the Chi-Square test to examine the relationship between the Health Belief Model (HBM) constructs and cervical cancer screening behavior in women of childbearing age (n = 422).

4. Bivariate Analysis

Table 9. Relationship between Health Belief Model Constructs and Cervical Cancer Screening Behavior

Variables	Category	Screening (n, %)	Not Screened (n, %)	Total	p-value
Perception of Vulnerability	High	102 (48.1%)	110 (51.9%)	212	0.012
	Low	66 (31.4%)	144 (68.6%)	210	
Perception of Severity	High	124 (43.1%)	164 (56.9%)	288	0.087
	Low	44 (32.8%)	90 (67.2%)	134	
Perceived Benefits	High	140 (46.4%)	162 (53.6%)	302	0.001
	Low	28 (23.3%)	92 (76.7%)	120	
Perception of Barriers	High	72 (27.1%)	194 (72.9%)	266	0,000
	Low	96 (61.5%)	60 (38.5%)	156	
Cues to Action	High	118 (49.2%)	122 (50.8%)	240	0,000
	Low	50 (27.5%)	132 (72.5%)	182	
Self-Efficacy	High	126 (50.0%)	126 (50.0%)	252	0,000
	Low	42 (24.7%)	128 (75.3%)	170	

a. Perceived Susceptibility

The chi-square test results showed a p-value of 0.012 (<0.05), indicating a significant relationship between perceived vulnerability and screening behavior. Respondents with high perceived vulnerability were more likely to undergo screening (48.1%) than those with low perceived vulnerability (31.4%). This suggests that awareness of personal risk plays a role in encouraging early detection.

b. Perceived Severity

A p-value of 0.087 (>0.05) indicates no significant relationship between perceived severity and screening behavior. Although most respondents considered cervical cancer a serious disease, this did not directly motivate them to undergo screening. This indicates that perceived severity alone is not sufficient to trigger preventive action.



c. Perceived Benefits

The analysis results showed a p-value of 0.001 (<0.05), indicating a significant relationship between perceived benefits and screening behavior. Respondents with a high perceived benefit were more likely to undergo screening (46.4%) than those with a low perception (23.3%). This confirms that understanding the benefits of screening is a key driver of health behavior.

d. Perceived Barriers

A p-value of 0.000 (<0.05) was obtained, indicating a highly significant relationship. Respondents with high barriers were less likely to screen (72.9%), while those with low barriers were more likely to screen (61.5%). This indicates that barriers are the dominant inhibiting factor in screening behavior.

e. Cues to Action (Signal to Action)

A p-value of 0.000 (<0.05) indicates a significant relationship between cues to action and screening behavior. Respondents with high exposure to information or external incentives were more likely to screen (49.2%) than those with low exposure (27.5%). This underscores the important role of health workers, the media, and the environment in triggering health actions.

f. Self-Efficacy

The test results showed a p-value of 0.000 (<0.05), indicating a significant relationship between self-efficacy and screening behavior. Respondents with high self-efficacy were more likely to undergo screening (50.0%) than those with low self-efficacy (24.7%). This indicates that an individual's belief in their abilities significantly influences their decision to undertake health interventions.

DISCUSSION

This study aims to analyze the relationship between Health Belief Model (HBM) constructs and cervical cancer screening behavior among women of childbearing age (WUS) in Padang City. Based on the results of bivariate analysis using the Chi-Square test in Table 9, five of the six HBM constructs showed a significant relationship with screening behavior: perceived susceptibility, perceived benefits, perceived barriers, cues to action, and self-efficacy. One construct, perceived severity, did not show a statistically significant relationship.

1. Perceived Susceptibility

The results of the study indicate a significant association between perceived susceptibility and cervical cancer screening behaviour among women of reproductive age ($p=0.012$). Respondents with a high perception of susceptibility were more likely to undergo screening than those with a low perception of susceptibility. This finding indicates that the higher an individual's belief regarding their own risk of developing cervical cancer, the greater their tendency to take preventive action through early detection screening.



From the perspective of the Health Belief Model, perceived susceptibility is one of the main components that form perceived threat. Individuals who believe they are likely to develop a disease will be more motivated to engage in preventive health behaviours. Conversely, when a person feels they are not at risk, the motivation to take preventive action tends to be lower even though information about the disease is available.

The findings of this study are consistent with the results of a scoping review conducted by Robbers et al. (2021), which showed that low risk perception is one of the main barriers to women's participation in cervical cancer screening programmes across various regions of Indonesia. Similar results were also reported by Bukowski et al. (2023), who found that women with a low perception of vulnerability were less likely to undergo screening than those with a higher perception of risk. The consistency of these results suggests that perceptions of personal vulnerability are a relevant factor in explaining cervical cancer early detection behaviour across various social and cultural contexts.

The researchers assume that there are still some women of reproductive age who have not linked the risk factors for cervical cancer to their own circumstances. Information regarding cervical cancer is often understood as a general threat, but is not yet perceived as a personal risk. This situation leads to the perception that screening is not yet an urgent necessity. Therefore, health education strategies need to be directed towards raising awareness of individual risk so that perceptions of vulnerability can develop in a more realistic manner.

2. Perceived Severity

This study shows that perceived severity is not significantly associated with cervical cancer screening behaviour ($p=0.087$). Although the majority of respondents had a high perception of the severity of cervical cancer, this perception was not directly linked to the decision to undergo screening.

According to the Health Belief Model, perceived severity plays a role in the formation of perceived threat. However, perceptions regarding the severity of the disease's consequences are not always sufficient to encourage health-related actions if they are not accompanied by a belief in the benefits of preventive measures and the ability to overcome existing barriers. In other words, individuals may understand that cervical cancer is a serious disease, but they may not necessarily undergo screening if psychological or structural barriers remain.

The results of this study differ from the findings of Putri et al. (2022), who reported a significant association between perceived severity and IVA screening behaviour. However, that study also showed that the influence of perceived severity is affected by interactions with other HBM constructs. Khoshnazar et al. (2024) found that an increase in perceived severity through HBM-based educational interventions was accompanied by an increase in screening behaviour, but this change occurred alongside an increase in perceived benefits and self-efficacy.

The researchers assume that some respondents view cervical cancer as a serious disease; however, this perception has not yet translated into concrete action due to the presence of other barriers, such as fear, embarrassment or limited access to services. Consequently, the perception of



severity appears to act more as a supporting factor than as a factor that directly drives screening behaviour.

3. Perceived Benefits

The results of the study indicate a significant association between perceived benefits and cervical cancer screening behaviour ($p=0.001$). Respondents with a high perception of benefits were more likely to report having undergone screening than those with a low perception of benefits.

According to the Health Belief Model, perceived benefits describe an individual's belief that a specific health action can yield positive outcomes in preventing or reducing the impact of disease. In the context of cervical cancer, the belief that screening can detect precancerous lesions at an earlier stage and improve the chances of successful treatment may encourage individuals to utilise early detection services.

These findings are consistent with the results of a systematic review and meta-analysis by Al-Ani et al. (2023), which reported that perceived benefits are a consistent predictor of cervical cancer screening behaviour. Similar results were also found by Robbers et al. (2021), who demonstrated that perceived benefits contribute to increased screening participation in several studies in Indonesia.

Researchers assume that the majority of women of childbearing age have a conceptual understanding of the benefits of screening. However, this understanding is not always translated into concrete action, as it is still influenced by other factors, particularly perceived barriers and the level of confidence in undergoing the examination. Therefore, efforts to improve the perception of benefits must be accompanied by measures to reduce barriers so that they can be translated into actual health behaviours.

4. Perceived Barriers

The research results show that perceived barriers have a significant relationship with cervical cancer screening behavior in women of childbearing age ($p<0.001$). Respondents who reported high barriers tended to undergo screening less frequently compared to respondents who had low barriers. These findings indicate that various perceived barriers, whether psychological, social, economic, or structural, remain important factors related to the low utilization of cervical cancer screening services.

In the framework of the Health Belief Model (HBM), perceived barriers are the individual's evaluation of various difficulties or negative consequences that may arise when taking a health action. This construct is often considered the factor closest to the decision-making process because individuals tend to weigh the balance between the benefits gained and the barriers faced. When the perceived barriers outweigh the perceived benefits, the tendency to take preventive actions decreases. Therefore, even if someone has good knowledge and understands the importance of early detection, the presence of strong barriers can reduce the likelihood of screening behavior.

The findings of this study are in line with the results of the systematic review conducted by Chua et al. (2021), which identified various major barriers to cervical cancer screening in Southeast



Asian countries, including lack of knowledge, fear of examination results, embarrassment during gynecological examinations, the influence of cultural and religious norms, and limited geographical and financial access. The results of the study indicate that the barriers to screening are multidimensional, necessitating a comprehensive intervention approach.

Similar findings were also reported by Robbers et al. (2021) thru a scoping review in Indonesia, which found that low trust in screening procedures, lack of information about service availability, and fear of examination results were common barriers reported by women of childbearing age. Additionally, the study by Tjokroprawiro et al. (2024) shows that the majority of cervical cancer patients who arrive at advanced stages have never undergone screening before and admit to having fears regarding the diagnosis and treatment processes. The results show that perceived barriers not only affect the decision to undergo screening but can also contribute to delays in disease detection.

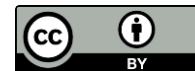
Although the results of this study are consistent with various previous studies, it is important to note that the magnitude of the impact of barriers may vary between regions according to the available social, cultural, and healthcare system characteristics. In areas with good access to services, psychological barriers may be more dominant, whereas in regions with limited healthcare facilities, structural and economic barriers may become more prominent factors.

The researchers assume that the barriers perceived by respondents in this study are likely due to a combination of psychological factors such as fear and shame, social factors such as lack of environmental support, and structural factors such as time constraints, costs, and access to healthcare services. These findings indicate that merely increasing knowledge may not be sufficient to enhance screening participation if these barriers are not addressed simultaneously. Therefore, health promotion programs need to be accompanied by efforts to improve service access, strengthen communication between healthcare workers and the community, and create an environment that supports the implementation of cervical cancer screening.

5. Cues to Action (Signal to Action)

The research results indicate that cues to action have a significant relationship with cervical cancer screening behavior in women of reproductive age ($p < 0.001$). Respondents with high cues to action showed a greater proportion of screening implementation compared to respondents with low cues to action. These findings indicate that the presence of certain stimuli or triggers can play a role in encouraging individuals to turn their intentions into actual actions, such as early detection screenings for cervical cancer.

According to the Health Belief Model, cues to action are triggering factors that activate an individual's readiness to take health actions. These triggers can originate from internal factors, such as the emergence of symptoms or concerns about health conditions, or external factors, such as health education, recommendations from healthcare professionals, media exposure, experiences of family members suffering from cancer, or support from the social environment. In the context of cervical cancer screening, cues to action serve as a catalyst that helps individuals translate their perception of risk and benefits into actual behavior.



The findings of this study are in line with the research by Putri et al. (2022), which found that cues to action are significantly related to IVA examination behavior among women of reproductive age. In the study, recommendations from healthcare professionals, educational activities, and support from the social environment were the most common triggers encouraging women to undergo the examination. The results indicate that the provision of accurate and continuous health information plays a significant role in increasing screening participation.

The research by Khoshnazar et al. (2024) also reported that education interventions based on the Health Belief Model were able to significantly increase cues to action scores, which were subsequently followed by an increase in Pap smear screening behavior. These findings indicate that systematically provided health stimuli can help increase individuals' awareness and readiness to take preventive actions.

Compared to previous research, the results of this study strengthen the evidence that cues to action are one of the important components in explaining cervical cancer screening behavior. However, the effectiveness of cues to action is likely not only determined by the frequency of the information received but also by the quality, relevance, and credibility of the information source. Information originating from healthcare professionals generally has a greater influence compared to information obtained passively thru mass media.

The researchers assume that there is still an imbalance in the distribution of health information regarding cervical cancer among women of reproductive age. Some respondents may have received sufficient information and support to undergo screening, while others have not been adequately exposed. Therefore, strengthening the roles of healthcare workers, health cadres, health communication media, and community groups can be an important strategy to enhance the effectiveness of cues to action in early detection programs for cervical cancer.

6. Self-Efficacy dan Perilaku Skrining Kanker Serviks

The research results show that self-efficacy has a significant relationship with cervical cancer screening behavior in women of childbearing age ($p < 0.001$). Respondents with high levels of self-efficacy reported having undergone screening more frequently than those with low self-efficacy. These findings indicate that an individual's belief in their ability to access and undergo examinations is related to the tendency to undergo cervical cancer screening.

In the development of the Health Belief Model, self-efficacy was added as a construct that explains an individual's belief in their ability to perform the necessary actions to achieve the desired health outcomes. This construct includes the ability to overcome fear, manage practical obstacles, make health decisions, and utilize available services. Individuals with high self-efficacy tend to be more confident in facing screening procedures and are better able to overcome obstacles that arise during the screening process.

The results of this study are in line with the findings of Al-Ani et al. (2023), who, thru a systematic review and meta-analysis, reported that self-efficacy is one of the factors consistently associated with cervical cancer screening behavior. Individuals with higher levels of self-efficacy are



more likely to take preventive actions compared to those with lower levels of self-confidence in their abilities.

Similar findings were also reported by Alsabi et al. (2022), which showed that self-efficacy plays an important role as a mechanism linking knowledge and health perception with actual behavior. The research explains that an increase in knowledge does not necessarily lead to a change in behavior if it is not accompanied by the belief that individuals are capable of carrying out the recommended actions. Thus, self-efficacy can be viewed as one of the factors that help bridge the gap between intention and health behavior.

If compared to previous research findings, this study's results reinforce the view that the success of screening programs does not only depend on the provision of information but also on individuals' ability to apply that information in real actions. Therefore, an educational approach that only focuses on increasing knowledge is likely not sufficient to produce optimal behavior change.

Researchers assume that some women of reproductive age with low self-efficacy still experience doubts when facing screening procedures, including concerns about test results, embarrassment, or uncertainty regarding the service procedures. Conversely, women with high self-efficacy tend to be more prepared to face these various challenges and are more confident in utilizing the available healthcare services. These findings indicate that health promotion programs need to integrate strategies to enhance self-efficacy, such as individual counseling, participatory education, simulation of examination procedures, and support by healthcare workers or health cadres. This approach has the potential to increase women's confidence in accessing screening services and support the sustainable improvement of early cervical cancer detection coverage.

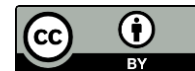
CONCLUSIONS

The prevalence of cervical cancer screening among women of reproductive age in Padang City was relatively low, with fewer than half of respondents reporting previous screening experience. Significant associations were identified between screening behavior and perceived susceptibility, perceived benefits, perceived barriers, cues to action, and self-efficacy, whereas perceived severity was not significantly associated with screening behavior.

These findings indicate that several Health Belief Model constructs are related to cervical cancer screening participation among women of reproductive age. In particular, perceived barriers and self-efficacy demonstrated stronger associations with screening behavior and may represent important targets for future health promotion interventions.

Given the cross-sectional nature of this study, the findings should be interpreted as associations rather than causal relationships. Further longitudinal or intervention studies are needed to clarify the temporal relationship between Health Belief Model constructs and cervical cancer screening behavior.

The results may provide useful evidence for developing theory-informed strategies aimed at improving cervical cancer screening uptake in Indonesia.



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