



Perceptions and Attitudes of Women of Childbearing Age towards Cervical Cancer Screening: A Cross-Sectional Study in Sukorambi Village

¹Ainun Ganisia*, ²Rakhmalia Imeldawati, ³Nurul Fathiyah, ⁴Cityta Putri Kwarto

Corresponding Author: *ainunganisia@unitomo.ac.id

¹ Midwifery, Faculty of Health Sciences, University of Dr. Soetomo, Indonesia

² Blood Bank Technology, Faculty of Health Sciences, University of Dr. Soetomo, Indonesia

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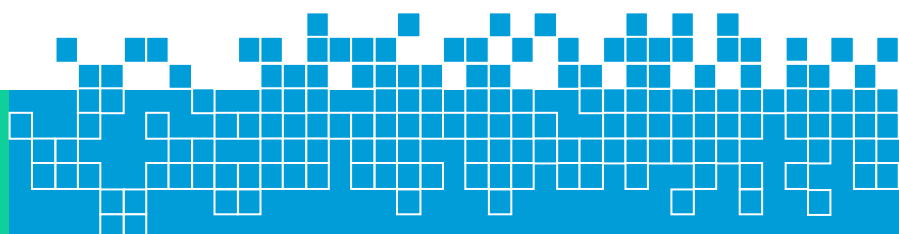
Abstract

In Indonesia, cervical cancer ranks as the second leading cause of death among women, coming in right after breast cancer, which holds the top spot. Early detection or screening is the primary modality carried out to overcome the high rate of cervical cancer deaths in Indonesia, but the number of screening participants is still low. One of the causes is the perception of women of childbearing age towards cervical cancer. This study aimed to explore the connection between the perceptions and attitudes of women of childbearing age towards cervical cancer screening. The research method used a cross-sectional design with a population of women aged 20-50 years in Sukorambi Village, Jember Regency. A total of 86 participants were involved, chosen through a cluster random sampling method. The findings revealed that the respondents' mean 34.66 years old, with the majority having a high school education (62.80%), the majority being unemployed (72.09%), and the majority being married (95.35%). The analysis showed p-value of 0.002, which is less than 0.05, along with a correlation coefficient of 0.324. This leads to the conclusion that a significant connection exists between perceptions and attitudes towards cervical cancer screening among women of childbearing age in Sukorambi Village. In increasing awareness of WUS, it is hoped that health workers will actively and routinely hold cervical cancer screening socialization activities to influence WUS attitudes towards cervical cancer screening.

Keywords: Perceptions, Attitudes, Cervical Cancer Screening

Introduction

Cervical cancer continues to be a major global health issue, especially in developing nations [1]. Globally, cervical cancer holds the position of the fourth most prevalent cancer among women and serves as the second primary cause of cancer-related deaths in women within specific age brackets. Cervical cancer ranks second among the leading causes of cancer deaths in women in Indonesia after breast cancer in first place [2]. Despite being preventable and treatable when caught early, the incidence of cervical cancer continues to be significant. Screening and early detection efforts are strategic steps to identify signs, symptoms, and suspicions when cancer is still in its early stages. Effective early detection can increase the chances of cure, accelerate public access to services, reduce financial burdens, and decrease cancer mortality [3]. Previous research has shown that implementing early detection can reduce cancer mortality by 30-50% through timely intervention and appropriate treatment [4].



Patients are often diagnosed at an advanced stage when curative treatment is no longer possible or practical. This occurs if early detection is not carried out. Continuous education to the public about screening and regular health check-ups are essential, as screening can help avert cervical cancer by identifying and addressing precancerous lesions early on. [5]. According to the Indonesian health profile, the percentage of WUS (Women of Reproductive Age) who undergo early detection or cervical cancer screening through IVA and Pap Smear in Indonesia is still very low at only 5% which is still very far from the target of 80% of the entire female population [6]. Preventive interventions, such as vaccination, screening, and detection, are priorities that not only support the government in achieving its target of eliminating cervical cancer by 2030 but also align with the Cervical Cancer Elimination Plan in Indonesia[7].

Factors influencing screening participation are complex, encompassing structural barriers such as access to healthcare and cost, as well as individual and psychosocial obstacles [8]. Among these psychosocial factors, perception and attitude play a significant role in an individual's decision to undergo screening. Perception is the way a person grasps and believes in their likelihood of developing cervical cancer, the severity of the condition, and the advantages of undergoing screening [9]. Meanwhile, attitude refers to a person's evaluation and mental readiness for the screening itself, encompassing feelings of shame, fear, or acceptance. Cervical cancer can be detected early or prevented if women of childbearing age have good knowledge and perceptions and are aware of early detection[10]. Therefore, understanding community perceptions and attitudes toward cervical cancer screening within the current social and cultural context is highly relevant. This study aims to analyze how the perceptions and attitudes of women of childbearing age influence their decision-making regarding participation in screening, with the goal of designing more effective and relevant health education interventions.

Material and Methods

The research method employed was a cross-sectional analytical observational study. Sampling using the cluster random sampling technique yielded 86 respondents, as determined by the Slovin formula. The inclusion criteria were women aged 20-50 years who lived in Sukorambi Village, were married, or had had sexual intercourse. The exclusion criteria were women with cervical cancer. Data were collected from demographic information (name, age, education, occupation), a perception questionnaire, and an attitude questionnaire. Referring to previous research in questionnaire selection, the perception questionnaire contained 10 statements, and the attitude questionnaire contained 20 statements assessed utilizing a Likert scale as follows: "strongly agree = 4," "agree = 3," "disagree = 2," and "strongly disagree = 1" [11]. Respondents who received a total score of 40 or more (values of 50% or above) indicated positive attitudes, whereas respondents who received a total score of less than 40 (values below 50%) denoted negative attitudes [12]. The gathered data was then examined using SPSS software. A Chi-square test was employed for bivariate analysis of categorical data, and Spearman's test was used for numerical data, with a significance level set at a P value of less than 0.05.

Results

Based on the study's results in Table 1, the average age of the respondents is 34.66. Most women of childbearing age have a high school education (62.80%), and the majority of respondents are unemployed (72.09%). Most participants were married (95.35%). In Table 1, it is known that there is a significant relationship between age and WUS attitudes towards cervical cancer screening, with $p=0.003$. A noteworthy connection exists between education levels and the attitudes of WUS towards cervical cancer screening, $p=0.021$. The study results revealed no meaningful correlation between employment and the attitudes of WUS towards cervical cancer screening, $p=0.275$. Likewise, the association between marital status and WUS attitudes towards cervical cancer screening was not statistically significant, $p=0.146$. The results of data processing in Table 2 indicate that respondents' perceptions have mean=24.42, SD=4.68, and median=24.44. The attitude of WUS towards cervical cancer screening has a mean=28.38 with SD=2.87 and median=28.10.

Table 1. Respondent characteristics based on attitudes towards cervical cancer screening.

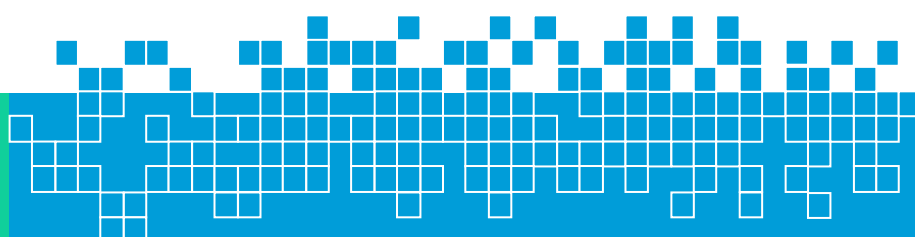
Variables	Attitudes				P value
	Positive		Negative		
	N	%	N	%	
Age (years)					0.003
20-50	62	72.09	24	27.91	
Education					0.021
Elementary School	2	2.33	5	5.81	
Junior High School	7	8.14	8	9.30	
Senior High School	42	48.84	12	13.95	
College	9	10.47	1	1.16	
Occupational					0.146
Employed	18	20.93	6	6.98	
Unemployed	33	38.37	29	33.72	
Marital Status					0.025
Married	47	54.65	35	40.70	
Unmarried	3	3.49	1	1.16	

Table 2. Distribution of perceptions and attitudes towards cervical cancer screening.

Variables	Mean	SD	Median	r	P value
Perceptions	24.42	4.685	24.44	0.324	0.002
Attitudes	28.38	2.874	28.10		

Discussion

The findings of the research indicated that there is a meaningful connection between age and attitudes towards cervical cancer screening ($p=0.003$). This research was in line with research in Nigeria, which explains that age has a powerful relationship with women's decisions or attitudes regarding cervical cancer screening (p -value 0.001) [11]. This showed that as age increases, especially in the productive age group and the age range of cervical cancer risk, the level of awareness and knowledge about screening (such as Pap smears or IVA) tends to increase. Exposure to health information, previous experience, and education from healthcare providers was more often received by older age groups, which in turn forms a more positive and proactive attitude towards screening.



There wasn't a notable connection between one's job and their views on cervical cancer screenings. The study found that the majority of women of childbearing age (WUS) were unemployed or homemakers (72.09%). The majority of respondents were unemployed. This may have resulted in insufficient data diversity to demonstrate a significant relationship between employment status and attitudes. Access to available screening services, cost of services, and availability of time for screening are often more significant barriers than employment status [13]. Social and cultural environments often had a greater influence than employment status. For example, social norms, support from a partner, or recommendations from the community can more strongly shape attitudes among women of childbearing age. In many cultures, health decisions, particularly those related to gynecology, are often influenced by approval or pressure from the immediate family, rather than the workplace. Other studies also found that the majority of women were unemployed or homemakers, and that family support was a factor influencing cervical cancer screening [14]. Marital status in the study showed a significant relationship with attitudes towards cervical cancer screening. These results aligned with other studies in Pakistan that have analyzed the influence of sociodemographic factors, including marital status, on knowledge and attitudes towards screening [15]. Research in Uganda found significant intimate partner factors (related to marital status) in screening decisions [16]. Most respondents were married and had sexual intercourse (95.35%). Marital status and sexual experience could indeed influence WUS decisions regarding screening. The risk of cervical cancer was generally lower for women who are unmarried and have never had sexual intercourse, so screening may not be necessary. However, marital status was not a significant determinant due to other factors. The health behavior model emphasizes that attitudes towards screening were determined more by the individual's internal psychological and cognitive factors, rather than by the type of employment [17]. Individual attitudes are strongly influenced by their perceived risk of developing cervical cancer and how seriously they consider the disease. A positive attitude toward screening arises when individuals perceived that the benefits of screening (prevention, early detection) outweigh the barriers (embarrassment, discomfort, cost). The decision to have a positive attitude toward screening was more influenced by encouragement from a husband, family, friends, or community than by employment status.

Based on the research results, it is known that education has a significant relationship with respondents' attitudes towards cervical cancer screening. The same results were found in research in Saudi Arabia, namely that education has a substantial relationship in women of reproductive age to undergo cervical cancer screening in primary health care [18]. Research in Malaysia also suggested that the level of education has a significant influence on knowledge and attitudes regarding cervical cancer screening [19]. The majority of respondents (62.80%) had a high school education, which is in line with other studies that show WUS are mostly educated to secondary or higher levels (51.61%) in the VIA examination [20]. Higher education had a greater level of knowledge compared to the lower secondary education group [21]. With good knowledge, good perceptions will be produced that are manifested in positive attitudes and behavior. Knowledge, perception, and attitude are psychological concepts that were interconnected and influence human behavior [22]. In this case, behavior involved making health

decisions. Education was essential for individuals in forming attitudes or making decisions regarding early detection of disease.

The study's findings showed a notable connection between how individuals perceive cervical cancer screening and their attitudes towards it ($p=0.002$). This finding aligned with other studies that clarify the connection between how serious cervical cancer is perceived to be and the viewpoint of WUS towards cervical cancer screening in Jatimulya Village, which was statistically supported by a p-value of 0.001 [23]. The Health Belief Model theory posits that aspects of an individual's beliefs and perceptions influenced their attitudes and behavior. Perceptions did not arise suddenly; instead, there was a necessary process that forms perceptions, which were influenced by experience, horizons, and individual knowledge [24]. People's perceptions can vary, including feeling healthy and not needing screening, fear of receiving results, perceptions of the pain associated with screening, and being unable to make a decision. Good perceptions arise from sound knowledge. In this case, the perception of women regarding the importance of cervical cancer screening was influenced by the knowledge they have [25]. With good knowledge and understanding, women were aware and do not hesitate to undergo cervical cancer screening.

Conclusion

This study concludes that there is a significant relationship between perceptions and attitudes regarding cervical cancer screening among women of childbearing age in Sukorambi Village. The limited number of respondents can be potential sampling bias or generalizability. This study suggests that future research should aim for a larger sample size to achieve more representative and accurate results. It is recommended that women of childbearing age increase their understanding of cervical cancer and the benefits of screening. It is anticipated that upcoming studies will examine the impact of environmental and media elements on women's involvement in cervical cancer screening programs. Support and collaboration between local governments, health workers, and the community are essential. Central and regional governments play a crucial role in formulating policies through community workshops and targeted health education programs (cervical cancer screening and early detection) to prevent deaths from cervical cancer and improve quality of life.

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Authors



Ainun Ganisia is a lecturer at the Faculty of Health Sciences, University of Dr. Soetomo, Surabaya, Indonesia. She actively carries out the Tri Dharma of Higher Education, which includes education, research, and community service, as well as activities related to her duties as a lecturer. (email: ainunganisia@unitomo.ac.id)



Rakhmalia Imeldawati is a lecturer at the Faculty of Health Sciences, University of Dr. Soetomo, Surabaya, since 2023. She actively participates in scientific meetings, research, and community service activities. (email: rakhmalia@unitomo.ac.id)



Nurul Fathiyyah is a lecturer at the Faculty of Health Sciences, University of Dr. Soetomo, Surabaya, since 2023. She is engaged in various scientific forums, research, and community service activities. (email: nurulfathiyyah@unitomo.ac.id)



Cityta Putri Kwartta is a lecturer specializing in Blood Bank Technology at the Faculty of Health Sciences, University of Dr. Soetomo, Surabaya, Indonesia. She is dedicated to academic activities, teaching, and community engagement. (email: cityta@unitomo.ac.id)