

The Role of Husbands, Cadres and Village Leader in Increasing Screening And Prevention Of Cervical Cancer In Metropolitan And Nonmetropolitan Cities in Indonesia

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ABSTRACT

Background: Annually, there are 36,633 new cases of cervical cancer in Indonesia. Cervical cancer is the fourth most common malignancy in women. According to the National Cancer Institute (NCI), cities outside metropolitan areas have lower cancer incidence rates, but higher cancer mortality rates than metropolitan cities. One of the most important elements of women's involvement in the early detection of cervical cancer can be seen in the husband's role of knowledge, emotions, and attitudes **Method:** The study employed a non-experimental method with a Cross-Sectional design. Following the inclusion and exclusion criteria of the study, 51 samples were taken from Yogyakarta and 51 samples from Jakarta. The samples were taken using cluster sampling. Data analysis included independent sample test to compare regions and multivariate analysis was applied to examine influential factors in husbands' roles. **Results:** The husband's emotional role was higher in the nonmetropolitan city, but the role of knowledge was higher in a metropolitan city in increasing cervical cancer screening. Significant differences were observed between the two groups in both knowledge ($p = 0.003$) and emotional support ($p = 0.010$). No significant difference was found in attitudes ($p = 0.395$). However, age was correlated with emotional support in metropolitan areas ($p = 0.011$). **Conclusion:** The study can significantly determine the role of husband, cadres and village leader knowledge and emotions in increasing screening and prevention of cervical cancer in metropolitan and nonmetropolitan cities in Indonesia.

Keywords: *Cervical cancer, Metropolitan, Nonmetropolitan, Husband.*

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1. PENDAHULUAN

Cervical cancer is the fourth most common malignancy in the world. In 2018, 570,000 women were diagnosed with cervical cancer, and 311,000 died from the disease (WHO, 2022). The National Cancer Institute (NCI) reports that cities outside metropolitan areas have lower incidences of cancer, but higher death rates than metropolitan areas (NCI, 2020).

In Indonesia, cervical cancer is the disease with the second highest death rate in women after breast cancer. Every year, 6,633 women of various ages are diagnosed with cervical cancer, and 21,003 die from this disease (GLOBOCAN, 2020; Solikhah et al., 2022).

The prevalence of cancer in Indonesia was recorded at 1.4 per 1,000 population in 2013, and 79 per 1,000 in 2018. The highest prevalence rate of this disease was in the Special Region of Yogyakarta Province, which was 4.86 per 1,000 population. (KEMENKES, 2019). Data from 2019 to 2020 showed that there were 9,933 cases of cervical cancer in DI Yogyakarta, and 79.4% were experienced by women. Most cases of cervical cancer in DI Yogyakarta are concentrated in Gunungkidul Regency, with a prevalence of 5,529 per 1,000 cases (Solikhah et al., 2022). Cervical cancer has the potential to be prevented because it has a long pre-invasive phase. Regular and effective screening, such as Pap Smear, allows early detection so that appropriate treatment can be given immediately. Pap Smear test is one of the main screening methods to detect cervical intraepithelial neoplasia in the precancerous and early stages of invasive cervical cancer. (Ghebreyesus et al., 2020; Sachan et al., 2018). WHO also supports the use of Human Papilloma Virus (HPV) tests in cervical screening, including HPV DNA and HPV mRNA tests which are effective in detecting high-risk HPV strains. (WHO, 2022).

One of the important elements in the success of early detection of cervical cancer is husband's support. Lack of support from husbands can prevent women from undergoing cervical cancer screening. Husband's support can provide a positive emotional effect and motivate wives to undergo screening. There are four forms of support that husbands can provide in this context: emotional support, knowledge, practical assistance, and appreciation. (Juwitasari et al., 2021). This support is an important aspect to encourage women in efforts to prevent and detect cervical cancer early in Indonesia. This study aims to investigate the husband's role of knowledge, emotions, and attitudes related cervical cancer screening.

2. METHODS

This study used a Cross Sectional method with primary data in the form of a questionnaire to analyze the differences in the role of knowledge, attitudes, and emotions of husbands, cadres and village leader in improving cervical cancer screening and prevention between metropolitan and nonmetropolitan cities. The study was conducted at 2 provinces including Jakarta as metropolitan city and Kulonprogo as nonmetropolitan city. This study involved 102 respondents consisting of 51 respondents in metropolitan cities and 51 in non-metropolitan cities.

Inclusion criteria

1. Husband, cadre and village leader in metropolitan (Jakarta) and non-metropolitan (Kulonprogo) cities
2. Voluntarily participating in research stages

Meanwhile, the exclusion criteria

Respondents who have incomplete data on questionnaire of cervical cancer screening
Data analysis through univariate and bivariate used SPSS 25.0

3. RESULTS

Table 1 Characteristics of respondent

Characteristics	Metropolitan		Nonmetropolitan	
	n	%	n	%
Role				
Village leader	19	35,8%	18	34%
Cadres	34	64,2%	35	66%
Age				
25 – 35	7	13,2%	10	18,9%
36 – 45	30	56,6%	31	58,5%

46 – 55	13	24,5%	8	15,1%	The
>55	3	5,7%	4	7,5%	
Married status					
Married	41	77,4%	50	94,3%	
Divorce Life	10	19,9%	2	3,8%	
Divorce by Death	1	1,9%	1	19%	
Not marry	1	1,9%	0	0%	
Occupation					
Village Head/Apparatus	16	30,2%	19	35,8%	
Government employees	7	13,2%	5	9,4%	
Housewife	7	13,2%	5	9,4%	
Farmers/Livestock	6	11,3%	5	9,4%	
Farmers/Fishermen					
Trader	2	3,8%	2	3,8%	
Honorary Employees	4	7,5%	5	9,4%	
Private sector employee	4	7,5%	2	3,8%	
Not working yet	2	3,8%	5	9,4%	
Casual Daily Laborer	0	0%	2	3,8%	
Other	5	9,4%	3	5,7%	
Total	53	100%	53	100%	

majority of the age range of metropolitan respondents was 46-55 years (43.1%), followed by the 36-45 years group (31.4%), and 25-35 years (21.6). The majority of respondents were married (96.1%), and worked as Civil Servants (PNS) at 27.5%. In the non-metropolitan group, the majority of respondents were 25-35 years old (37.3%), married husbands were (88.2%), and worked as PNS (27.5%). The majority of the respondents occupation is Village Head/Apparatus (30.2%), followed by the 36-45 years group (31.4%), and 25-35 years (21.6). The majority of respondents were married (96.1%), and worked as Civil Servants (PNS) at 27.5%. In the non-metropolitan group, the majority of respondents were 25-35 years old (37.3%), married husbands were (88.2%), and worked as PNS (27.5%).

Table 2 Respondents' Knowledge, Emotions and Attitude

Indicators	Characteristics							
	Age				Marriage status			
	Metropolitan		Nonmetropolit an		Metropolitan		Nonmetropolita n	
	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.
Knowledge	5.015	.542	2.040	564	.085	958	0.136	712
Emotional	16.639	.011	9.717	374	.021	771	1.568	912
Attitude	1.538	.674	2.105	910	.085	364	0.184	667

Most of the characteristics, such as age and marital status, do not have a significant relationship with the three indicators (knowledge, emotional, and attitude), with a Sig. value > 0.05 . The significance value is 0.010 ($p < 0.05$), with a higher mean in the metropolitan group. However, there is no significant difference in the attitude indicator, with a significant value of 0.395 ($p > 0.05$). However, there is one significant relationship between age and the emotional indicator in the metropolitan group, with a Sig. value of 0.011 ($p < 0.05$).

4. DISCUSSION

This study shows that there is a significant difference in the emotional role and knowledge between the two groups with a P value for the emotional role of 0.03 and knowledge of 0.010. The level of husband's knowledge is higher in metropolitan cities, while the emotional role is higher in nonmetropolitan cities. This is in line with previous studies which stated that the role of husbands in terms of knowledge and emotion is positively related to women's participation in cervical cancer detection through Visual Acetic Acid (IVA) (Fitriah et al., 2023; Juwitasari et al., 2021).

Occupational factors are one of the reasons why there are differences in the role of knowledge between husbands in metropolitan and non-metropolitan areas. Husbands who work in formal environments such as government offices, private companies, or educational institutions tend to have better access to health information and good facilities (Habibah et al., 2022). In addition, age characteristics also affect husbands' awareness of family health, where older husbands are usually more aware of health risks due to more life experience, while younger ones are more open to health information from digital media (Atrinitati et al., 2024; Tawa et al., 2023).

The emotional role of husbands in supporting cervical cancer screening is also influenced by age and economic factors. Younger husbands in non-metropolitan cities show more consistent emotional involvement, while in metropolitan cities, the age difference results in greater variation in emotional involvement. Husbands with a good economic background, generally in metropolitan cities, have a higher awareness of family health. (Coombs et al., 2022; Jaya Rochkmana et al., 2020). In the process of collecting respondent data, it was carried out in two different cities so that it took a long time to collect. The role of attitudes of cadres and village heads in non-metropolitan cities is higher than in metropolitan cities and this difference is statistically significant. Gosbell et al. (2023) stated that the role of attitudes is needed to increase the level of women's participation in cervical cancer screening programs in metropolitan cities. However, research conducted by Srisuwan et al. (2015), stated that the role of attitudes of cadres does not necessarily influence women to accept cervical cancer screening examinations.

The existence of younger age factors and higher knowledge is related to the role of attitudes of cadres and village heads in non-metropolitan cities (Doherty et al., 2011; Winarto et al., 2022). However, in this study, it was found that the role of attitudes of cadres and village heads in both metropolitan and non-metropolitan cities did not have a statistically significant relationship ($p > 0.05$) with the age of cadres and village heads. In line with the research of Maseko et al. (2022) which stated that the role of attitudes was not significantly related to age, marital status, and education level of cadres.

Different from the emotional and attitudinal roles, the role of knowledge of cadres and village heads in metropolitan cities is higher than in non-metropolitan cities. However, the results of this difference do not have a significant difference in statistical figures. The higher role of knowledge in metropolitan cities could be due to work factors. As many as 73% of female workers in DKI Jakarta have good knowledge about cervical cancer and are based on differences in educational background, work, age, sources of information, socio-cultural, economic, and environmental (Hardiyanti et al., 2020). In addition, training interventions through successful community programs for cadres and village heads have an impact on increasing knowledge about cervical cancer screening and prevention (Kienen et al., 2018; Supriyatiningsih et al., 2022). Sources of information containing cervical cancer screening and prevention can be a factor in the level of knowledge that does not vary in metropolitan and non-metropolitan cities. The source of information that is highly trusted by cadres and village heads in both metropolitan and non-metropolitan cities is a source of information from health experts. Credible sources regarding cervical cancer are health experts, which was also found in several studies (Ampofo et al., 2023; Chepkorir et al., 2024). During data collection, the information provided by respondents through the questionnaire may not reflect the respondent's actual opinion, because other factors such as differences in each respondent's assumptions and elements of honesty in filling out the questionnaire can occur. This study has limitations in previous research literature that researchers still lack.

5. CONCLUSIONS

Husbands, Cadres and Village leaders collaborate actively in supporting mothers to undergo cervical cancer screening in metropolitan and nonmetropolitan areas. There needs to be socialization from non-health sectors to increase literacy of husbands, cadres and village leaders regarding the importance of cervical cancer screening for women.

Conflict of Interest

The authors declare no potential conflict of interest.

Availability of Data and Materials

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Author Contributions

SW: concept, data provision, data analysis, data and result interpretation, writing and discussion, funding acquisition. MNBD: data collection, data and result interpretation, RSA: data collection, data and result interpretation, LF: data and result interpretation, writing, and discussion, JH: concept, data provision, data analysis, discussion. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

This study was granted ethical approval from the health research ethics committee of Universitas Muhammadiyah Yogyakarta with No. 010/EC-KEPK FKIK UMY/III/2024 to investigate the husband's role of knowledge, emotions, and attitudes related cervical cancer screening. This study's participants voluntarily participated and signed a written consent form before participating the activities. Informed consent was obtained from all participants. All data collection was performed per relevant guidelines and regulations (Declaration of Helsinki). In addition, the participants received incentives related to this activity.

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