

# Reinforcing Factors and the Behavior of Early Detection of Cervical Cancer in Women of Childbearing Age

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Abstract. The purpose of this study was to determine the relationship between reinforcing factors and the behavior of early detection of cervical cancer in women of childbearing age (WCA) in Medan City. Research Methods Correlational quantitative research design involving 150 WCA as respondents through nonprobability sampling with purposive sampling. The study was done after receiving approval from Ethics Committee by explaining the purpose, benefits, procedures and signing informed consent. Data were collected through knowledge, attitude, and behavior questionnaires, then analyzed using Chi square. The results showed that most of the respondents received support from husband/family, friends, religious leaders, health workers and the government, but the behavior of early detection of cervical cancer which included knowledge, attitudes and self-examination behavior was still low. This study showed that reinforcing factors (family/husband, peer, religious leader, health workers, and government support) were not related to behavior (knowledge, attitude, and self- examination behavior) of early detection of cervical cancer through the VIA test. Conclusion There is no relationship between reinforcing factors and early detection behavior of cervical cancer in WCA in Medan.

Keywords: Reinforcing factors · early detection of cervical cancer

# 1 Introduction

Indonesia is one of the developing countries with the highest prevalence of death from cervical cancer (Colombo N, 2021; Marth et al. 2017). Cervical cancer in women will cause various disorders which would also impact their children and family. The natural occurrence has challenged researchers to detect the disease at early stage, or at the stage

where the disease has not become cancerous, known as cervical precancerous lesions. Cervical cancer occurs due to a change from normal uterine cells to abnormal cells which then divide excessively and uncontrollably which could grow into a tumor. It usually takes about 10 to 20 years from first infected before the disease become cancerous, thus, most cervical cancers are detected after the age of 40 years (Ferlay, 2015).

In 2015, there were 283 cases of cervical cancer in North Sumatra Province, with the highest prevalence in the 45–54 years age group, according to data from the North Sumatra Health Office. The high prevalence of cervical cancer patients was seen at Haji Adam Malik General Hospital where in 2017, the hospital has treated 5,007 cervical cancer patients (new and old patients) and 121 cervical cancer patients who were treated in the emergency department. In 2018, the prevalence was higher in individuals living in the urban areas compared to rural areas, which was 1.7% higher in 2013 and increased to 2.06% in 2018. The incidence of cervical cancer increased in the 25–34 years age group and peaked in the 45–54 years age group with an Age Specific Death Rate (ASDR) of 29.5 per 100,000 women (Ferlay, 2015).

Based on data obtained from various hospitals, it was found that 70% of cervical cancer cases were at stage four or metastatic (Mumba J, 2021). The epidemiological burden of cervical cancer is quite high in Indonesia compared to other cancer types, and various preventive measures such as early detection of cervical cancer has been carried out. There are three ways of prevention that can be done, namely primary, secondary, and tertiary prevention. Primary prevention to prevent HPV infection can be done through health education and HPV vaccination where prophylactic vaccination against HR-HPV has been shown to be effective (Mirghani et al. 2017). Several larger randomized phase III clinical trials have demonstrated a significant reduction in the incidence of anogenital HPV 16 and 18 infection, genital warts, and cervical and anal precancerous lesions, and have resulted in the licensing and implementation of these vaccines in various national immunization programs. The HPV vaccine can be given to girls who are not sexually active. However, HPV vaccination is still expensive for underdeveloped countries and is only available in limited quantities, so it has not been used as a mass immunization. Secondary prevention can be done with early detection and appropriate treatment for individuals who have been diagnosed with cervical cancer. Tertiary prevention can be done with disability prevention and rehabilitation (Mirghani H. et al., 2017).

The Medan City Health Office stated that 41 health centers throughout Medan have provided early detection services for cervical cancer using the visual inspection with acetic acid (VIA) method. The percentage of women of childbearing age (WCA) who did cervical cancer examinations with the IVA Test in 2015 was only 1.26%, while in 2016 there were 110 out of 2,493 WCA who were VIA positive for cervical cancer. The highest percentage was seen at Medan Tuntungan Health Center with 5.05%. Up until 2019, in North Sumatra, early detection of cervical cancer using the VIA test had been carried out on 113,416 women aged 30–50 years or 5.07%, which has increased from 2018 with 89,394 people or 4.5%. The coverage rate of cervical cancer screening in WCA in the age group of 30–50 years was highest in North Padang Lawas Regency with a percentage of 74.57%, followed by Samosir Regency, 25.22%, and Toba Samosir Regency, 14.20%. Meanwhile, the coverage rate of cervical cancer screening in the Medan region ranks 19th with a percentage of 2.13%. In North Sumatra and Medan

City, data showed that the coverage of the VIA test was still very low, below the national target of 50% (Kemenkes RI, 2019).

Behavior can affect the environment and the environment can also affect behavior. Health services play a role in improving the health and welfare of the community. There would be a reduced risk for unfavorable genetics when placed under a healthy environment and behaviors. This shows that behavior is important for health. It can be concluded that the main targets for promoting the importance of health is behavior and environment, especially the environment that influences behavior. Green classifies this into 3 groups of behavioral factors, namely enabling factors (which allows enabling factors that are already conducive to change into behavior), predisposing factors (which are preconditions for voluntary behavior), reinforcing factors (which will strengthen or reduce the desired behavior), and this is in accordance with the main objective of health promotion, which is to increase the degree of health and well-being in the society. Thus, it is concluded that health promotion can create a condition which would allow people to live a healthy lifestyle and easy to be carried out.

There have been several studies on the causes of WCA not carrying out early detection in order of year, including research in 2011–2020. The Ministry of Health of the Republic of Indonesia (Kemenkes RI) stated that the national coverage targets for women aged 30–50 years who carried out early detection was only 10% of the total women who were required to do so. In 2017, the total coverage of early detection of cervical cancer reached 2.98% which has not met the national target set (Kemenkes RI, 2017). A study conducted by Kashyap (2019) explained that women from a low economy class did not take prevention measures, such as HPV vaccination and pap smear examinations due to high costs. The results of research conducted by Armini et al. (2019) stated that the factor influencing the wives for not carrying out health examination such as VIA test was because of most husbands do not recommend their wives to do the examination. Thus, it is concluded that individuals would likely to do something when getting support and encouragement from their surroundings such as family (husband), close friends or colleagues, health workers, religious leaders, and community leaders.

A preliminary study has been conducted by researchers in 2020 on the description of the reinforcing factors of 100 WCA in Medan, North Sumatra. It showed that the role of the majority religious leaders was not present by 84%, community leaders did not exist by 87% and the role of health cares did not exist by 75%. In line with the study by Afsah (2017), exposure to health information will encourage early detection of cervical cancer. These data indicated that the factors influencing the behavior of early detection of cervical cancer are still very low, thus, cancer is found more often at advanced stage.

Therefore, there might be a significant effect between reinforcing factors on the behavior of early detection of cervical cancer through the VIA test. Based on the above, researchers are interested in examining the relationship between reinforcing factors and the behavior of early detection of cervical cancer in WCA in Medan.

### 2 Materials and Methods

#### 2.1 Study Design

This study used a quantitative correlation design with a correlation coefficient test to determine the degree of relationship between reinforcing variables (family or husband, peers, religious leaders, health care workers, and government support) and behavioral variables (knowledge, attitudes, behavior in detecting early cervical cancer).

#### 2.2 Participants

There were a total population of 685,218 women of childbearing age in Medan, North Sumatra. The number of samples in this study were amounted to 150 women who met the sample criteria (inclusion and exclusion) and drop out criteria.

Inclusion criteria include willingness to be a respondent, ability to read and write, compos mentis awareness, respondents with own smartphones that can install GBKS Intervention Group application via Google Play Store, married, not pregnant, and live within the work area of the Medan Sunggal Health Center. Exclusion criteria include: Squamocolumnar junction (SCJ) is not visible. Drop out criteria include not fully participating in the study and moving out of the research location.

#### 2.3 Procedures

This research was conducted from March to August 2021. Selected respondents were those who had met the inclusion criteria and had signed the Informed Consent form. Then, respondents filled out a questionnaire using a *Bitly* link to find out the data on reinforcing factors which included: family or husband support, peer support, religious leaders support, health worker support, and government support, also data on knowledge, attitude and behavioral observations for early detection of cervical cancer.

### **3** Outcome Measurement

This study used a questionnaire as the instrument (knowledge, attitudes, behavior for early detection of cervical cancer) which has been tested for validity and reliability. The validity test was carried out using Content Analysis Validity. Reliability test of the knowledge questionnaire showed Cronbach's Alpha value of 0.897, thus, reliable. Reliability test on attitude questionnaire showed Cronbach's alpha value of 0.895, which was also reliable. A knowledge questionnaire consisting of 25 multiple-choice questions on the respondent's understanding of cervical cancer and its prevention efforts through VIA test was carried out. A score of less than 76% was deemed as poor while a good score was achieved when it was more than or equal to 76%. An attitude questionnaire with a total of 25 questions, a negative score if the assessment result was less than 78%, and a positive score if the score is more than or equal to 78%. The behavior for early detection of cervical cancer was done through observation sheets on doing VIA test in the form of done or not done.

# 4 Statistical Analysis

The analytical method used was univariate and bivariate analysis. Univariate analysis was used to analyze the data on respondent characteristics, and Chi Square was used for bivariate analysis.

# 5 Ethical Consideration

This research has received an ethical approval letter from the Ethics Commission for the Implementation of Health Research with letter No. 538/KEP/USU/2021 and a research permit from the Health Office with letter No. 440/23621/VI/2021.

# 6 Results

Based on Table 1, most respondents were at the age of 36–45 years old with a proportion of 36.6% (55 people), while the age group with the smallest proportion was 17–25 years with 11.4% (17 people). Most respondents first had sex at the age of >20 years, with 86% (129 people) while only 14% (11 people) first had sex at <20 years. More than half of the respondents had higher education (college/university graduates) with a proportion of 53.4% (80 people), while the education level with the smallest proportion was elementary school at 6.6% (10 people). Most of the respondents have an income of more than Rp. 2,499,423.00 with a proportion of 53.4% (52 people), while others have an income of less than Rp. 2,499,423.00 with a proportion of 34.6% (52 people).

Variable	Z	n	%
Age			
17-25 years old		17	11.4
26-35 years old		32	21.4
36-45 years old		55	36.6
>45 years old		46	30.6
First time becoming			
sexually active			
<20 years old		11	14.0
>20 years old		129	86.0
Education			
SD		10	6.6
SMP/SMA		60	40.0
College/University		80	53.4
Income			
<rp 2,499,423.00<="" td=""><td></td><td>52</td><td>34.6</td></rp>		52	34.6
>Rp 2,499,423.00		98	65.4

Table 1. Supporting Factors of Women of Childbearing Age in Medan, 2021

Independent Variables	Knowledge				Total	OR	95% CI	р
	Enough/Good		Lacking					
	n	%	n	%				
Husband support								
Support	36	24.0	96	64.0	132	1.697	0.611-	0.307
No support	7	4.6	11	7.4	18		4.716	
Independent		Knowledge			Total	OR	95 % CI	Р
Variables	Enough/Good		Lack	Lacking				
	n	%	n	%				
Peer support								
Support	33	22.0	89	59.3	122	1.498	0.628-	0.360
No support	10	6.7	18	12.0	28		3.577	
Religious leaders support								
Support	30	20.0	80	53.0	110	1.284	0.587- 2.811	0.531
No support	13	8.7	27	18.3	40			
Health workers support								
Support	40	26.7	100	66.7	140	1.071	0.264-	1.000
No support	3	2.0	7	4.6	10		4.351	
Government support								
Support	40	26.7	100	66.7	140	1.071	0.264- 4.351	1.000
No support	3	2.0	7	4.6	10			

**Table 2.** The Relationship between Reinforcing Factors and Knowledge of Early Detection of Cervical Cancer in Women of Childbearing Age in Medan

Based on Table 2, of the 132 respondents who received support from their husbands, only 24.0% had sufficient or good knowledge while 64.0% had less knowledge about early detection of cervical cancer. On the other hand, there were 18 respondents who did not get husband support, where 4.6% had sufficient/good knowledge and 7.4% lacked knowledge about early detection of cervical cancer. There is no relationship between husband support and knowledge of cervical cancer early detection as p-value was 0.307 (p >0.05). Of the 122 respondents who received peer support, only 22.0% had sufficient/good knowledge about early detection of cervical cancer. There were 28 respondents without peer support, where 6.7% had sufficient/good knowledge and 12.0% lacked knowledge about early detection of cervical cancer. P-value was 0.360, so it can be concluded that there was no relationship between peer support and knowledge of early detection of cervical cancer. There were 110 respondents who received support from religious leaders, of which 20.0% had sufficient or good knowledge and 53.0% lacked knowledge about early detection of cervical cancer. Of the 40 respondents who did not get support from religious leaders, only 8.7% had sufficient or good knowledge about early detection of cervical cancer. There was no relationship between the support of religious leaders with knowledge of early detection of cervical cancer (p = 0.531). Support from health workers and government also showed similar results. Of the 140 respondents who received the

Independent - Variables -	Attitude				Total	OR	95% CI	Р
	Positive		Negative					
	n	%	n	%				
Husband support								
Support	35	23.3	97	64.7	132	1.066	0.354-	1.000
No support	5	3.3	13	8.7	18		3.207	
Peer support								
Support	31	20.8	91	60.6	122	1.390	0.570-	0.467
No support	9	6.0	19	12.6	28		3.392	
Religious leaders support								
Support	26	17.3	84	56.0	110	1.740	0.794-	0.164
No support	14	9.3	26	17.3	40		3.813	
Health workers support								
Support	39	26.0	101	67.3	140	0.288	0.035-	0.291
No support	1	0.6	9	6.0	10		2.347	
Government support								
Support	38	25.3	102	68.0	140	0.671	0.136-	1.000
No support	2	1.3	8	5.3	10		3.303	

**Table 3.** The Relationship between Reinforcing Factors with Attitudes of Early Detection of Cervical Cancer in Women of Childbearing Age in Medan

support of health workers, 26.7% and 66.7% had sufficient/good and lacked knowledge about early detection of cervical cancer, respectively. Of the 10 respondents who did not get support from health workers, 2.0% had sufficient or good knowledge and 4.6% had less knowledge. P-value was 1.000 thus, there was no relationship between the support of health workers and knowledge of early detection of cervical cancer. There were 140 respondents who received government support, of which 26.7% and 66.7% had sufficient/good and lacked knowledge about early detection of cervical cancer, respectively. In the group who did not receive government support, only 2.0% had sufficient/good knowledge 4.6% about early detection of cervical cancer. There was no relationship between government support and knowledge of early detection of cervical cancer (p = 1.000).

Based on Table 3, of the 132 respondents who received support from their husbands, only 23.3% had a positive attitude while 64.7% had a negative attitude towards early detection of cervical cancer. There were 18 respondents who did not get husband support, only 3.3% had a positive attitude towards early detection of cervical cancer. There was no relationship between husband support and early detection of cervical cancer (p = 1.000). Of the 122 respondents who received peer support, only 20.8% had a positive attitude towards early detection of cervical cancer (p = 1.000). Of the 122 respondents who received peer support, only 20.8% had a positive attitude towards early detection of cervical cancer. There was no relationship between beer support, where 6.0% had positive and 12.6% had negative attitude towards early detection of cervical cancer. There was no relationship between peer support and early detection of cervical cancer (p = 0.467).

Independent Variables		Behav	ior		Total	OR	95% CI	Р
	Did		Did not do					
	n	%	Ν	%				
Husband support								
Support	26	17.3	106	70.7	132	1.165	0.354-	0.759
No support	4	2.7	14	9.3	18		3.833	
Peer support								
Support	22	14.7	100	66.7	122	1.818	0.710-	0.209
No support	8	5.3	20	13.3	28		4.659	
Religious leaders support								
Support	20	13.3	90	60.0	110	1.500	0.632-	0.356
No support	10	6.7	30	20.0	40		3.560	
Health workers support								
Support	28	18.7	112	74.7	140	1.000	0.201-	1.000
No support	2	1.3	8	5.3	10		3.972	
Government support								
Support	28	18.7	112	74.7	140	1.000	0.201-	1.000
No support	2	1.3	8	5.3	10		4.972	

**Table 4.** Relationship between Reinforcing Factors and Behavior of Early Detection of Cervical Cancer in Women of Childbearing Age in Medan

There were 110 respondents who received support from religious leaders, where only 17.3% had a positive attitude and 56 point 0 percent had a negative attitude towards early detection of cervical cancer. Of the 40 respondents who did not get support from religious leaders, 9.3% and 17.3% positive and negative attitude, respectively. There was no relationship between the support of religious leaders with the attitude of early detection of cervical cancer (p = 0.164). Of the 140 respondents who received the support of health workers 26.0% had a positive and 67.3% had a negative attitude towards early detection of cervical cancer. Of the 10 respondents who did not get support from health workers, 0.6% and 6.0% had positive and negative attitude towards early detection of cervical cancer, respectively. There was also no relationship between the support of health workers and the attitude of early detection of cervical cancer (p = 0.291). There were 140 respondents who received government support, 25.3% and 68.3% had a positive and negative attitude towards early detection of cervical cancer, respectively. Of the 10 respondents who did not receive government support, 1.3% had a positive and 5.3% had a negative attitude. Similarly, there was no relationship between government support and early detection of cervical cancer.

From Table 4, there were 132 respondents who received support from their husbands, and only 17.3% did an early detection of cervical cancer. There were 18 respondents who did not get husband support, of which 2.7% and 9.3% did and did not do early detection of cervical cancer, respectively. There was no relationship between husband support and early detection behavior of cervical cancer (p = 0.759). Of the 122 respondents who received peer support only 14.7% did the early detection of cervical cancer. There

were 28 respondents with no peer support, where 5.3% did and 13.3% did not do early detection of cervical cancer, respectively. The p-value obtained was 0.209, thus, there was no relationship between peer support and early detection of cervical cancer. There were 110 respondents who received support from religious leaders did and did not do early detection of cervical cancer.

Of the 40 respondents who did not get support from religious leaders, only 6.7% did early detection of cervical cancer. Again, no relationship was observed as p = 0.356. Likewise, support from health workers and government showed similar results. Of the 140 respondents who received the support of health workers, only 1.3% did the early detection of cervical cancer. Similarly, only 1.3% of 10 respondents who did not get support from health workers did an early detection of cervical cancer. There was no relationship between the support of health workers and the behavior of early detection of cervical cancer (p = 1.000). There were 140 respondents who received government support where do the early detection of cervical cancer. Of the 10 respondents who did not get government support.do early detection of cervical cancer, respectively. There was also no relationship between government support and early detection of cervical cancer (p = 1.000).

### 7 Discussion

The results showed that there was no relationship between family support (husband) and knowledge, (p = 0.307), attitude (p = 1.000), and behavior of early detection of cervical cancer (p = 0.759). Most respondents received support from their husbands to take the VIA test, but of the 132 respondents, only 19.7% took the VIA test. These results were in line with the research conducted by Ayu et al. in 2020 at the Sukmajaya Health Center, Depok City. Based on the results of the study, it was found that there was no relationship between family support and the tendency to take VIA test (p = 0.276). However, a study conducted by Bellinger et al. in 2013 showed the opposite result where there was a relationship between family support and the behavior of early detection of cervical cancer (pap smear) with a p-value of 0.021 (p < 0.05) (Bellinger et al. 2013). Husband support is very important to improve the behavior of early detection of cervical cancer. It is considered as a form of interaction where there is a relationship of giving and receiving real assistance done by the husband to his wife (Dsouza et al. 2022). In line with the research conducted by Laili et al. in 2019, it was found that husband's role in the implementation of early detection of cervical cancer is quite large because to be able to carry out an early detection examination the majority of mothers always ask for their husband's consent (Laili et al. 2019).

In this study, we assumed that people who were considered important by women would greatly influence the behavior of early detection although the results showed the opposite. In terms of early detection of cervical cancer in WCA, husbands play an important role in providing support as what is said and done will tend to be followed and heard. Most WCA were still lacking knowledge and have a negative attitude towards early detection of cervical cancer despite the support. As there was no relationship between husband support and the behavior of early detection of cervical cancer, the strategy that could be done is through the implementation of GBKS application. This application can be used as a source of knowledge for WCA or any users such as husbands to provide more insights and it is hoped that this knowledge could be used to increase support towards women health, especially on the early detection of cervical cancer.

There was no relationship between peer support and knowledge (p = 0.360), attitudes (p = 0.467), and behavior of early detection of cervical cancer with (p = 0.209). This was in line with the research conducted by Adyani and Realita in 2020 at the Cepiring Health Center, Kendal. The results showed that there was no relationship between peer support and and the tendency to take VIA test (p = 0.066) (Adyani and Realita 2020). Despite the 122 respondents receiving peer support, only 18.0% did the early detection. Friends, especially close friends, can affect decision making. They could influence the decision to have an examination, similarly, their reluctance towards examination would also give the similar effect to the WCA, which was the tendency to not do the test. This was different from the research conducted by Martaningrum et al. (2020) on the relationship between peer support and the behavior of early detection of cervical cancer. In the study, the relationship was significant, which indicated that there was an influence from peer and husband support towards the behavior of early detection.

Researchers suspected that the lack of knowledge and motivation among females in childbearing age was the contributing factor for the behavior of early detection of cervical cancer as there was no shared motivation. Thus, we suggested that creating a peer support group through GBKS application could provide information and knowledge about early detection of cervical cancer, and it is hoped that the information obtained can be a source of ideas exchange and sharing platform to support each other in early detection.

There was no relationship between the support of religious leaders with knowledge (p = 0.531), attitudes (p = 0.164), and behavior of early detection of cervical cancer (p = 0.536). This was in line with the research conducted by Nyambe, et al. (2018) where there was no relationship between health workers, teachers, and religious leaders in lowering cervical cancer cases in Zambia women, but most importantly, it was found that awareness, knowledge, social support, and facilities are the factors that must be improved. We recommended the use of GBKS application in this 4.0 era to overcome the problems that might occur in the behavior of early detection of cervical cancer.

Support from health workers was also not related to knowledge (p = 1.000), attitudes (p = 0.291), and behavior of early detection of cervical cancer (p = 1.000). This was not in line with the research conducted by Citra (2019) It showed the high number of WCA (55.7%) who received support from health workers also did the VIA test (59.0%). P-value in this study was 0.021, which indicated the significance of support of health workers towards the early detection of cervical cancer. Based on the analysis of questionnaire on the support of health workers, most respondents, 62%, who received support tend to do the VIA test. Despite the insignificance between health workers support and behavior of early detection, we assumed that the roles of health workers are still critical in lowering the incidence of cervical cancer, so it is necessary to provide health workers with the required knowledge and skills to improve the behavior of early detection. Health workers can also use the GBKS application that has been made by researchers as a media to provide knowledge to public, especially women.

Government support also showed similar results where there was no relationship between government support and knowledge (p = 1.000), attitudes (p = 1.000), and

behavior of early detection of cervical cancer (p = 1.000). Similarly, despite the many supports from religious leaders towards early detection of cervical cancer, there were still very few respondents (18.2%) who were willing to do the VIA test. The results of this study were not in line with the research conducted by Nyambe, et al. (2018) on women in Zambia where it was stated that government support through services related to cervical cancer, such as screening and vaccination have been developed and proved effective to lower the number of cervical cancer cases. The support obtained from the government include the Papilloma Virus Prevention and Control Council, optimization of HPV vaccination, and screening the early detection of cervical cancer and has been successfully promoted through a well- coordinated communication campaign and integrating (social) media to spread awareness.

We assumed that context-based and evidence-based strategies, such as social media, is critical to increase the awareness of early detection of cervical cancer through VIA test or to carry out vaccination. In line with this research, the use of the GBKS application is appropriate to help support preventive measures through increasing the understanding of the risks and benefits of early detection of cervical cancer. Problems such as large population could be overcome by using only one media that is easily accessible to anyone, such as the GBKS application.

Health workers were also very supportive towards the early detection of cervical cancer, but of the 140 respondents who received support from health workers, only 20.0% did the early detection. The support of health workers is very important to increase exposure to information which will increase knowledge and is also expected to increase the behavior of early detection of cervical cancer, especially through VIA test (Nurhasanah 2017). It is thought as a driving force for individuals to do begin doing check-up. Women of childbearing age who received support from health workers would do more VIA tests as health workers are considered to have a better understanding of health problems so that health workers should be more involved in providing education to WCA. Meanwhile, from government support, only 20.0% of the 140 people did early detection of cervical cancer. The government plays a role as a policy maker and provide infrastructure to increase awareness of cervical cancer early detection. It is hoped that government agencies can carry out the VIA test as one of the programs for early detection of cervical cancer in WCA. Research conducted by Isabirye A, et al. (2020) stated that very few women in Uganda had early detection of cervical cancer. Research findings showed that women from high socioeconomic status and education level were more sensitive to and responsive to cervical cancer screening compared to those with lower status. In this study, we suggested that the increase in early detection of cervical cancer can be improved by overcoming social inequality and more access to resources and knowledge. Researchers assumed that the implementation of GBKS would be very effective in overcoming to the problems related social inequality and provide a good access to resources and knowledge.

#### 8 Conclusion

There was no relationship between reinforcing factors (family or husband, peer, religious leaders, health workers, and government support) on the knowledge, attitude, and behavior of early detection of cervical cancer in WCA in Medan City. **Funding.** DRPM fund research from Ministry of Research and Technology for higher education 2021.

**Ethical Consideration.** The study has been approved by Research Ethics Committee from the Commission of the Health Research Ethics Universitas Sumatera Utara No.538/KEP/USU/2021.

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