INCREASING REPRODUCTIVE HEALTH AWARENESS THROUGH VISUAL INSPECTION OF ACETIC ACID TESTS IN THE COMMUNITY

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Received: June 2024 Revised: June 2024 Accepted: June 2024 **ABSTRACT** Cervical cancer is one of the leading causes of death in women in Indonesia. Early detection through IVA (Visual Acetate Inspection) examination can significantly reduce the death rate from cervical cancer. However, awareness and knowledge regarding the importance of VIA examinations is still low among the community, especially in rural areas. Padukuhan Tonggalan Kalurahan Wedomartani Kapanewon Ngemplak Sleman Regency is one of the working areas of the Ngemplak II Community Health Center. Lack of understanding of cervical cancer is the main reason why women of childbearing age in Tonggalan Padukuhan do not have pap smears and IVA tests. According to the 2024 Village Community Health Development Community Midwifery Field Study Practice data survey, 70% of women said they did not routinely do pap smears or IVA tests because they feared the procedure and the results obtained. This activity aims to detect cervical cancer or precancerous cervical lesions early in mothers or female couples of childbearing age so that rapid and appropriate management can be carried out immediately. The method of this community service activity is to carry out direct examinations on Women of Childbearing Age (WUS) as an initial screening for the possibility of precancerous cervical lesions. Implementation of activities in Padukuhan Tonggalan, Wedomartani Village, with the number of participants in the Iva Test examination being 7 WUS. The results of the IVA test showed that all WUS was negative, and no white spots were found on the cervix. Two women were referred to the Community Health Center for follow-up treatment because signs of inflammation were found in the cervical area. Conclusion: The free Iva Test carried out in Padukuhan motivates women of childbearing age to be able to maintain their reproductive health against the possibility of being exposed to precancerous lesions.

KEYWORDS: Early Detection of Cervical Cancer, Precancerous Lesions, Visual Inspection of Acetic Acid Test, Women of Childbearing Age.

1. INTRODUCTION

Cervical cancer is the leading cause of cancer deaths in developing countries. Cervical cancer is cancer in the lower area of the uterus that connects the uterus to the vagina. Normal cervical cells infected with Human Papilloma Virus (HPV), especially types 16 and 18, slowly develop into precancerous. According to Globocan 2002 data, there were 40,000 new cases of cervical cancer, with around 22,000 deaths in women in Southeast Asia. Indonesia is in first place with 15,050 new cases and 7,566 deaths annually. (Barnabas et al., 2006; Poli et al., 2015; Torres-Poveda et al., 2019). One of the causes of the high incidence rate in developing countries is the limited information about cervical cancer, as well as early detection as prevention in the form of pap smears, IVA tests and vaccines. Risk factors for uterine cancer include sexual intercourse at a young age (less than 20 years), changing sexual partners, frequently suffering from infections in the genital area, and giving birth to many children. Other risk factors are deficiencies of vitamins A, C and E and exposure to cigarette smoke.(Chang et al., 2017; Poli et al., 2015)

Tonggalan Padukuhan is a hamlet comprising 2 RWs and 4 RTs, which are part of Wedomartani Village, Kapanewon Ngemplak, and Sleman Regency. Each RW has a diverse number of mothers of reproductive-age couples. So far, several mothers have carried out the IVA test to detect cervical cancer, but there are still many mothers who have never had this examination due to a lack of money and knowledge. In this regard, the author intends to organize IVA Test examination activities for WUS (women of childbearing age) so that it can provide benefits to mothers of couples of childbearing age so that they can be more stable in carrying out early detection of cervical cancer.

This activity aims to detect the presence of cervical cancer or precancerous cervical lesions early in mothers/women of reproductive age so that prompt and appropriate management can be carried out immediately. The benefit is that it can increase the understanding of mothers of reproductive age couples about cervical cancer and how to detect it early.

2. METHOD

Based on the problems faced by partners, the solution offered by the author is a free Pap smear and IVA test. The activity was held on Saturday, 4 May 2024, at 09.00 WIB - and finished at Padukuhan Tonggalan, Wedomartani Village. The WUS target participants were 20 people, of which 7 people attended. Service providers carry out an IVA test for suspicious signs, then continue with a Pap smear to educate WUS. The contribution of partner participation is that this activity collaborates with the Head of Padukuhan as the place's owner and facilitator and assists in the technical implementation of IVA Test inspection activities.

3. RESULT AND DISCUSSION

3.1 Result

Community service activities run smoothly, namely free Iva Test examinations in Padukuhan Tonggalan. The community, especially mothers who are included in the Women of Childbearing Age (WUS) group, are willing to listen to education about the importance of the Iva Test and Pap Smear examinations as part of efforts to find out as early as possible whether there are precancerous lesions or not so that appropriate follow-up can be carried out later if there are positive (+) examination results. This community service activity was implemented in collaboration between the service team and the Ngemplak II Community Health Center. All IVA Test results carried out on seven WUS people were all declared hostile (-), or no precancerous lesions were found in all participants, so no follow-up efforts were needed, but only education and motivation to maintain reproductive health, especially preventing neck cancer. Womb. Two mothers were referred to the Community Health Center for further treatment because signs of inflammation were found in the cervical area.

3.2 Discussion

The government's efforts to prevent cervical cancer include 4 critical components, namely: prevention of HPV (Human Papilloma Virus) infection, early detection through increased awareness and an organized screening program, diagnosis and management, and palliative care for advanced cases. Several early detection methods, including the Visual Inspection Acetic Acid (IVA) Test method, can be used. The implementation of community service activities by providing facilities in the form of free IVA Test & Pap Smear examinations for residents of the Padukuhan Tonggalan community is by Indonesian government policy because the IVA Test method is by the conditions of the majority of people who have limited economic, health advice and infrastructure. (Demuth T, 2015).

The lack of compliance of women of childbearing age to take part in screening programs is still lacking, so the majority of people living with cancer come to health services already in an advanced stage, so the healing process cannot be carried out optimally. Increasing knowledge about the importance of early detection of cervical cancer is fundamental. With good knowledge about cervical cancer and its problems, it is hoped that it can increase the motivation of women of childbearing age to participate in precancerous lesion screening programs actively. (de Wilde et al., 2010; Nishimura et al., 2021; Wolf et al., 2018)

The lack of motivation and knowledge of WUS in Padukuhan Tongggolan is in line with the results of previous research, which states that the factors related to the IVA Test examination at

PUS are that the higher the knowledge, the higher the awareness of carrying out the IVA Test. (Rizani, 2020; Simanjuntak et al., 2021).

Knowledge about cervical cancer is significant for a woman; with good knowledge, it is hoped that it will increase the woman's compliance in undergoing examinations as early as possible to avoid the occurrence of cervical cancer. Based on the results of the IVA test that had been carried out, all participants had negative (-) results, so no further action was needed to confirm the diagnosis. Therefore, according to the government's target, women of childbearing age (WUS) must undergo early detection every 5 years. IVA examination is an early detection program for cervical cancer implemented by the government and included in the Decree of the Minister of Health of the Republic of Indonesia No.796/MENKES/SK/VII/2010 concerning technical guidelines for controlling cervical and breast cancer. The results of the IVA test were negative (-), then supported by increased knowledge about cervical cancer, which includes, among other things, the definition, prevalence, signs and symptoms, risk factors, frequency and conditions for carrying out VIA examinations, so that you will be more alert to the possibility of getting cervical cancer so that WUS will carry out VIA examinations regularly and continuously as an effort to prevent cervical cancer. (Demuth T, 2015; Muhith et al., 2020; Torres-Poveda et al., 2019)



Figure 1. Education about the Importance of the IVATest



Figure 2. Photo with one of the clients after the IVA test

4. CONCLUSION

Following the results of implementing community service activities in Padukuhan Tonggalan, Ngemplak District, it can be concluded:

- a. Community service activities ran smoothly even though the target participants were not achieved because the mother was still afraid of the procedures and examination results.
- b. The results of the IVA test for all participants who attended were all declared hostile (-), so no referral or further examination was needed to support the diagnosis. Two participants were referred to the Community Health Center for further treatment because signs of inflammation were found in the cervical area.

Recommendation

Partners can increase knowledge among all members of the community, especially women of childbearing age (WUS) so that they will further increase awareness and motivation to continue to strive for early detection of cervical cancer..

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CONFLICT OF INTERESTS

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REFERENCES

- Barnabas, R. V., Laukkanen, P., Koskela, P., Kontula, O., Lehtinen, M., & Garnett, G. P. (2006). Epidemiology of HPV 16 and cervical cancer in Finland and the potential impact of vaccination: Mathematical modeling analyses. *PLoS Medicine*, *3*(5), 624–632. https://doi.org/10.1371/journal.pmed.0030138
- Chang, H. K., Myong, J. P., Byun, S. W., Lee, S. J., Lee, Y. S., Lee, H. N., Lee, K. H., Park, D. C., Kim, C. J., Hur, S. Y., Park, J. S., & Park, T. C. (2017). Factors associated with participation in cervical cancer screening among young Koreans: A nationwide cross-sectional study. *BMJ Open*, 7(4). https://doi.org/10.1136/bmjopen-2016-013868
- de Wilde, J., Kooter, J. M., Overmeer, R. M., Claassen-Kramer, D., Meijer, C. J. L. M., Snijders, P. J. F., & Steenbergen, R. D. M. (2010). HTERT promoter activity and CpG methylation in HPV-induced carcinogenesis. *BMC Cancer*, *10*, 8–10. https://doi.org/10.1186/1471-2407-10-271
- Demuth T. (2015). Peraturan Menteri Kesehatan Republik Indonesia Nomor 34 Tahun 2015 Tentang Penanggulangan Kanker Payudara dan Kanker Leher Rahim. 36(June), 5860.
- Muhith, A., Winarti, E., Idola Perdana, S. S., Haryuni, S., Rahayu, K. I. N., & Mallongi, A. (2020). Internal locus of control is a driving factor of early detection behavior of cervical cancer by the visual inspection of the acetic acid method. *Open Access Macedonian Journal of Medical Sciences*, 8(E), 113–116. https://doi.org/10.3889/oamjms.2020.4341
- Nishimura, H., Yeh, P. T., Oguntade, H., Kennedy, C. E., & Narasimhan, M. (2021). HPV self-sampling for cervical cancer screening: A systematic review of values and preferences. *BMJ Global Health*, 6(5), 1–14. https://doi.org/10.1136/bmjgh-2020-003743
- Poli, U. R., Bidinger, P. D., & Gowrishankar, S. (2015). Visual inspection with acetic acid (via) screening program: 7 years experience in early detection of cervical cancer and pre-cancers in rural South India. *Indian Journal of Community Medicine*, 40(3), 203–207. https://doi.org/10.4103/0970-0218.158873
- Rizani, A. (2020). Faktor-Faktor yang Berhubungan dengan Pemeriksaan IVA (Inspeksi Visual Asam Asetat) pada PUS (Pasangan Usia Subur). *Jurnal Skala Kesehatan*, *12*(2), 115–125.
- Simanjuntak, Y. T., Siahaan, J., & Panjaitan, M. (2021). Hubungan Faktor Predisposing, Enabling dan Reinforcing dengan Keikutsertaan WUS melaksanakan Pemeriksaan IVA. *Jurnal Surya Muda*, *3*(1), 12–22. https://doi.org/10.38102/jsm.v3i1.73

- Torres-Poveda, K., Ruiz-Fraga, I., Madrid-Marina, V., Chavez, M., & Richardson, V. (2019). Highrisk HPV infection prevalence and associated cofactors: A population-based study in female ISSSTE beneficiaries attending the HPV screening and early detection of cervical cancer program. *BMC Cancer*, 19(1), 1–12. https://doi.org/10.1186/s12885-019-6388-4
- Wolf, A. M. D., Fontham, E. T. H., Church, T. R., Flowers, C. R., Guerra, C. E., LaMonte, S. J., Etzioni, R., McKenna, M. T., Oeffinger, K. C., Shih, Y. T., Walter, L. C., Andrews, K. S., Brawley, O. W., Brooks, D., Fedewa, S. A., Manassaram-Baptiste, D., Siegel, R. L., Wender, R. C., & Smith, R. A. (2018). Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. *CA: A Cancer Journal for Clinicians*, 68(4), 250–281. https://doi.org/10.3322/caac.21457