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Cervical Cancer Awareness among Women in North Jakarta

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Abstract

Objective: To asses awareness of cervical cancer among women in North Jakarta, knowledge of the disease, awareness of the preventive measures, participation and barriers to attending the screening services.

Methods: This study is a cross-sectional, questionnaire-based survey conducted at Sukapura and Cilincing Primary Health Care Services and Sukapura Islamic Hospital between October 2019 to February 2020.

Results: A total of 400 women were included in the study. The mean age was 30 (± 8.6) year old. Most participants were married with more than one child. On the level of education, large number of participants graduated from high school. Among 6 questions of cervical cancer global knowledge, 74.75% have heard of cervical cancer which can be deadly. Around half of them knew it was caused by infection (56.75%) and screening availability for prevention existed (60.75%). There were 10 symptoms provided in the questionnaire and all of them were not known as the symptoms of cervical cancer by the participants. Even the contact bleeding only identified by 117 over 400 participants as the symptoms. Multiple sexual partners, poor immunity status, and uncircumcised sexual partner were the perceived risk factors. Given the knowledge of the participants, only 11.25% participants had the HPV vaccination, 16% had Pap's Smear and 8.5% had VIA. The reasons for not attending the screening services were dominantly caused by the worrisome of the procedure discomfort.

Conclusion: The low uptake of screening services despite the availability could result not only from the limited knowledge about the disease but also the fear of the procedure. A more aggressive campaign should be held to make sure women really understand the importance of cervical cancer screening and its benefits to women's quality of life.

Keywords: Cervical cancer; Cervical cancer prevention; Cervical cancer awareness; Indonesian women; Pap smear, VIA; Cervical cancer screening barriers

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Introduction

Cervical cancer is the most common type of gynecological cancer [1]. According to GLOBOCAN 2018, cervical cancer is the leading cause of women death beside breast cancer [2]. More than 93 million women in Indonesia is at risk on developing cervical cancer and approximately 21.000 new cases are diagnosed annually, making cervical cancer as the second most common cancer in Indonesian women [3]. *Human papillomavirus* (HPV) is the causative agent of cervical cancer. One study in Indonesia has shown that HPV was detected in 96% cervical cancer patients; HPV 16 and HPV 18 were found in 83% [14]. Since the natural history of cervical cancer has been revealed to be related with persistent infection of *Human papillomavirus*, the screening strategy has been developed to detect early cases of persistent HPV infection or finding precancerous lesions. The screening strategy with Pap's smear has showed cervical cancer screening is considered one of the most significant public health interventions that can reduce not only the incidence, but also the mortality of the disease [5]. Another way to screen the disease is to detect DNA of oncogenic HPV.

Screening with Pap smear needs technology based resources and also human resources which are hardly found in rural area. Visualization of cervix with acetate acid or known as VIA is another option of screening which is relatively feasible in developing countries such as Indonesia [6]. Despite the high prevalence of cervical cancer, many studies have shown that women's knowledge about HPV, cervical cancer and cervical screening is very low [7]. This study aims to asses cervical cancer

awareness among women in North Jakarta.

Materials and Methods

A cross-sectional, questionnaire-based survey was carried out. A purposive sampling was chosen with the inclusion criteria; women in the age of 18 to 60 years old and domiciled in North Jakarta. An exclusion criterion is incapability to read and write in Bahasa Indonesia. The study was carried out at various health care service settings in North Jakarta; Sukapura Islamic Hospital, Sukapura and Primary Healthcare and Cilincing Primary Healthcare between October 2019 and February 2020. There were 593.279 women aged 18 to 60 in North Jakarta per October 2019 based on Dinas Provinsi DKI Jakarta report. A total of 400 women were selected based on Slovin's formula for the total study to be representative and eligible for population study.

Extensive review of literature, exploratory research and qualitative piloting contributed to the development and refinement of a structured questionnaire in Bahasa Indonesia. The questionnaire consisted of 5 sections; socio demographic information, knowledge about cervical cancer, awareness about preventive measures for cervical cancer, participation and barriers to attending screening services, miscellaneous. The section on knowledge about cervical cancer consisted of questions about general knowledge of cervical cancer, risk factors and symptoms of cervical cancer. Their awareness about primary and secondary preventive measures for cervical cancer was assessed. Women's participation in screening services were enquired and those who had never attended screening services were enquired about the likely reasons for not utilizing them. Following the interview, women were given health education regarding cervical cancer also where and when the best time to do it. Ethical approval was obtained from the Ethic Committee of Sukapura Islamic Hospital. As for data collection in Sukapura Primary Healthcare and Cilincing Primary Healthcare, the permit was given from the Head of Primary Healthcare (PUSKESMAS) and an informed consent for each questionnaire distributed was also attached. Demographic characteristics, knowledge, attitude and practice of cervical cancer screening were described using descriptive statistics including percentages, frequencies, mean, Standard Deviation (SD).

Results

Sociodemographic information

The mean age of this study is 30 SD ± 8.6. The participants are varied in ethnics, but Javanese accounts for 41.75% (n=167). This study is dominated with married women, accounts for 93.75% (n=375). 50.25% of participants are multipara (n=201). 51% graduated high school (n=204). Most of the participants are unemployed, accounts for 78.25% (n=313). 92.5% of the participants are a member of the national health insurance known as BPJS (n=370). 21% of the participants are a member of private insurance (n=84).

Knowledge about cervical cancer

Interpretation: Most participants have heard of cervical cancer but only a few think they can actually get it. Less than a quarter of the participants have relatives with cervical cancer, but more than half of them know prevention methods for cervical cancer exist. More than half of the participants know cervical cancer is associated with infection and mostly the participants know it can be deadly (Figure 1).

Interpretation: Most participants answer don't know to

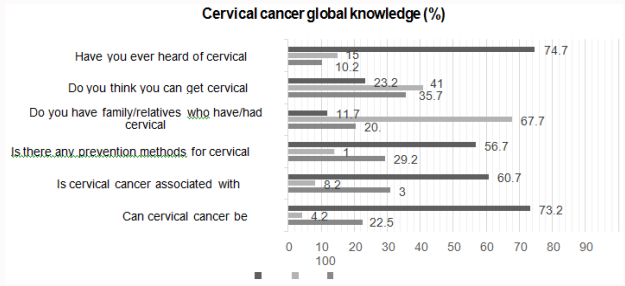

Figure 1: Cervical cancer global knowledge.

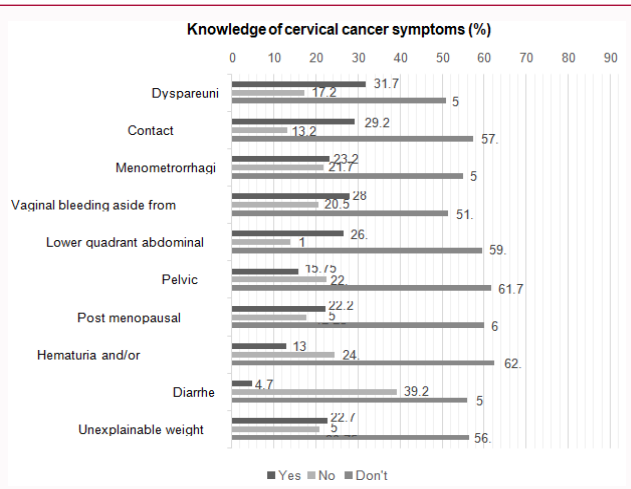

Figure 2: Knowledge of cervical cancer symptoms.

the cervical cancer symptoms mentioned in the questionnaire; dyspareunia, contact bleeding, menometrorrhagia, vaginal bleeding aside from menstrual, lower quadrant abdominal pain, pelvic pain, post menopausal bleeding, hematuria/hematoschezia, diarrhea and unexplainable weight loss (Figure 2).

Interpretation: Most participants succeed to identify HPV infection, multiple sexual partners, first intercourse at early age (<17 yo), uncircumcised sexual partner, STIs and poor immunity status as risk factors, but not for multipara, not doing pap smear periodically and long term contraceptive use (Table 1).

Awareness about preventive measures for cervical cancer

Interpretation: Only a few of the participants have heard of primary preventive measures; HPV vaccination, and lesser have done it, not even a tenth of the participants repeated it. As for secondary prevention measures; Pap's smear, a bigger number of participants have heard it but not even half of them whom have heard, done it, less than a tenth of the participants repeated the procedure. VIA as secondary prevention measures have been heard only by a few participants and less of them have done or repeated it Figure 3.

Participation and barriers to attending screening services

There's a bigger number of participants who aren't willing to do the secondary preventive measures; Pap's smear or VIA with 52.75% aren't willing to do Pap smear and 56.75% aren't willing to do VIA. Most reasons the participants give for barriers to attending screening services are the worrisome of the procedure discomfort, expressed by 66 participants for Pap smear and 79 participants for VIA. Following reasons are such worried of the results, procedure cost, clueless of where to do the procedure, have had hysterectomy and unexplained.

Table 1: Perceived risk factors.

Statement	Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
HPV Infection	8.25	39.25	36.5	8.25	7.75
Not doing pap smear periodically	4	27.75	42	20.25	6
Multipara	4	10.5	36.5	38	11
Multiple sexual partners	12.25	47	19.25	12.25	9.25
First intercourse at early age (<17 yo)	5.5	35.75	32.5	17.5	8.75
Uncircumcised sexual partner	3	40	26	22	9
Gonorrhea, chlamydia or other STIs	8.75	39.5	33.75	12	6
Long term contraception use	3	23.25	42.25	24.5	7
Poor immunity status (e.g. HIV/AIDS, TBC, Lupus, etc)	6.25	42.75	36.5	10	4.5
Smoking	6	37.25	34.25	14.5	8

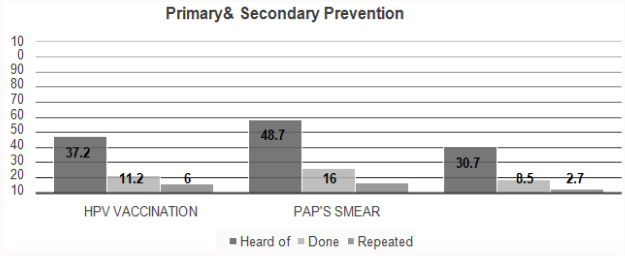

Figure 3: Primary and secondary prevention measures.

Miscellaneous

A 42.25% (n=169), of the participants think we can develop cervical cancer at any age, 32.5% (n=130) in between 30 year to 49 year old, 15% (n=60) in between 20 to 29 year old, 9% (n=36) in between 50 to 69 year old and 1.25% (n=5) greater equal to 70 year old. 81.5% of the participants are not sure they can know if they get cervical cancer (n=326) and 18.5% are sure (n=74). Most participants gained information about cervical cancer from school community (n=170), followed by television (n = 131), healthcare settings (n=60), radio (n=36) and health promotion (n=5).

Discussion

Cervical cancer is largely preventable. The role of HPV in the development of cervical cancer allows for the implementation of the prevention of cervical cancer. Primary prevention of cervical cancer is through vaccination and secondary prevention is through cervical screening, to detect and treat abnormalities while they are in the precancerous stage, before possible progression to cervical cancer. The strength of cervical screening comes from repeating the screening test at agreed rescreening intervals, which allows more accurate detection of precancerous abnormalities over the long pre-invasive stage of squamous cervical cancers. Recognition of cervical screening as a program of rescreening at regular intervals rather than as a single opportunistic test was important [8]. In this study, less than half of the participants are aware of cervical cancer perceived risk factors and even though more than half of the participants know there's prevention method for cervical cancer, only a few have heard of Pap smear, IVA or HPV vaccination and there's less who have done or repeated it. More than half of the participants aren't willing to do the secondary prevention for cervical cancer with the most answered reason; the discomfort of the procedure.

For effective screening and prophylaxis, it is of utmost importance to understand the knowledge, perceptions, and beliefs of the population especially that of the healthcare staff as they constitute an important source of propagation of health- related information. Many studies conducted in the developing countries have shed light on the level of understanding and knowledge of the population, which could provide useful information to the healthcare systems to develop appropriate educational strategies [9]. In this study, it showed even though most of the participants have heard of cervical cancer, more than half of the participants answer don't know to the cervical cancer symptoms statements and only a few know cervical cancer is associated with infection. There are more of participants who think they can get cervical cancer and know it can be deadly but are clueless to their familial history of cervical cancer. Less than half of them the participants think we can develop cervical cancer at any age but most of them aren't sure they can know if they do get cervical cancer. Most information the participants gained are from the school community.

In 2016, the Indonesian Ministry of Health initiated a trial project for assessing the inclusion of HPV vaccination in the BIAS program, in the DKI Jakarta province using the quadrivalent (QHPV) vaccine. This demonstration project is a mandatory step before implementation of the NIP and this would be expanded to other provinces on an annual basis [10]. There are many other factors that could be related to the adherence to cervical cancer screening both at contextual level, such as the type of health care system, the accessibility of care, the presence of an organized screening program, environmental, social and cultural factors, and at individual level, such as age, racial and ethnic factors [11]. Even though almost half of the participants have income lower than the province standard wages, they are mostly a member of the national health insurance or BPJS and cervical cancer preventive measures are provided by the primary healthcare facilities in Jakarta. Nevertheless, many still aren't willing to do the preventive measures for cervical cancer. Awareness through education is an important way to empower women to participate in cervical cancer screening programs actively [12].

Conclusion

The low uptake of cervical cancer screening services could result from the superficial knowledge of the disease, but not limited to that extent as the role of fear of the procedure also plays. It would very much be beneficial for women if a more aggressive campaign were held but not only as a routine play but to more personalized and detailed oriented method. The importance of cervical cancer screening should also be emphasized, not only reminding women to do so but rather giving a well understanding so the awareness comes from within themselves.

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