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## RESEARCH ARTICLE

### Cervical Cancer Related Knowledge, Attitude and Behaviour Among Women in Makasar District Primary Health Care Centre in 2018

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#### Abstract:

#### Introduction:

Cervical cancer is the 4<sup>th</sup> most prevalent cancer in women worldwide. Mortalities and morbidities are still increasing despite its preventability. The knowledge, attitude and behaviour of women in fighting cervical cancer are very important.

#### Objective:

This study aims to record knowledge, attitude, and behaviour of women in reproductive age regarding cervical cancer at Makasar District Primary Health Care Centre, East Jakarta in 2018

#### Material and Methods:

Descriptive cross-sectional study was conducted. Knowledge, attitude, and behaviour of cervical cancer were obtained using an assisted interview and recorded. The receipt of services towards cervical cancer prevention is referred to be favourable and unfavourable

#### Results:

Of the total 105 samples, the mean age was 30 years and mostly graduated from Junior High School (66.7%). More than half (59%) participants had poor knowledge about cervical cancer, but 89% of the participants had favourable attitude in receipt of services towards cervical cancer prevention. Despite the poor knowledge, 21.9% of the participants had been screened before.

#### Conclusion:

The knowledge and behaviour towards cervical cancer among women in Makasar Primary Health Care Centre are still inadequate but have favourable attitude.

**Keywords:** Cervical cancer, Knowledge, Behaviour, Attitude, Therapeutic measures, Prevention.

#### Article History

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## 1. INTRODUCTION

Cervical cancer is the 4<sup>th</sup> most prevalent cancer in women worldwide [1]. Undoubtedly, it is one of the most frequent forms of cancer that affect women, hence causes high morbidities and mortalities. The methods of prevention and therapeutic measures of cervical cancer have advanced, as in the United States, cervical cancer incidence decreased to 8 cases per 100,000 women per year on 2003-2007 [2]. Meanwhile in Indonesia, cervical cancer is still a big problem

that is yet to be solved. This is contradictory to the advancement of prevention and screening methods of cervical cancer. According to the Indonesian Ministry of Health Data (2015), cervical cancer is the third most common cause of cancer in women. [2] In Dharmais National Cancer Centre, the mortality of patients with cervical cancer in 2013 reaches 65 cases, with 356 new cases. The trend of both mortality and incidence is increasing each year [3].

Facilities have been given to primary health centres throughout Indonesia, but lack of awareness and the knowledge of cervical cancer among women is still considered to be important. This study is aimed to find out the knowledge, attitude, and behaviour of women in reproductive age regarding cervical cancer.

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## 2. MATERIALS AND METHODS

We conducted a descriptive, cross-sectional study to assess the knowledge, attitude, and behaviour of cervical cancer among women in reproductive age (>15 years old) who came to Makasar Primary Health Care Centre. Makasar Primary Health Care Centre is a government-owned clinic which serves primary health care. There were 121 patients who came to the health centre, but only 105 (86.7%) agreed to participate. According to Jakarta Health Profile 2017, 58.49% of the women who come to the health centres are among reproductive age [4]. Participants were asked to give their consent and will be assisted in an interview to answer questionnaires. The questionnaires used are cited from previous research, translated into Bahasa Indonesia and was validated by an expert in oncology division, Obstetric and Gynaecologic Department in Cipto Mangunkusumo Hospital in Jakarta [5].

The participant's knowledge was assessed by a questionnaire consisting of 26 questions. Any correct answer will be given 1 point and the wrong answer will be given 0 point. The maximum score was 26. Attitude score was assessed by a questionnaire consisting of 4 statements about the receipt of services towards cervical cancer prevention. They were given closed questions and were told to answer agree, neutral or disagree towards the questions. The responses were categorised to 3 categories: "positive", "neutral" and "negative". The response was considered positive if the participant answered correctly. End results will be grouped into

favourable attitude if positive responses were recorded towards  $\geq 2$  statements, and unfavourable if positive responses were less than 2. The practice was grouped into screened, and never screened. Good practices are referred to those who have screened for cervical cancer.

Socio-demographic status and basic questions regarding cervical cancer were recorded, analysed using SPSS version 20. Descriptive statistics were translated into tables.

## 3. RESULTS

Table 1 shows the socio-demographic profile of the respondents in this study. The mean age of the respondents was  $30 \pm 5,94$  years. Majority of the respondents (66.7%) education level was Junior High School. Most of the women are housewives (74%) and were married at their reproductive age or over 20 years (89%).

Majority of the participants (95.2%) have heard about cervical cancer. Most of the participants answered "bleeding that does not fit the menstrual cycle" and "having more than one sex partner" when asked about the symptoms and risk factors. Twenty-three participants didn't know the answer to the questions given about cervical cancer symptoms and 8 participants (7,61%) didn't know the answer to the questions about the risk factors (Table 2). Only 43 (41.9%) participants knew more than half of the aspects of cervical cancer knowledge in this study (Table 3).

**Table 1. Socio-demographic profile of the respondent.**

Characteristic	Number (%)
Age (yrs) (mean +/- SD)	30,0 ± 5,94
Level of education	
Primary School	4 (3,8)
Junior High School	70 (66,7)
Senior High School	6 (5,7)
Diploma	8 (7,6)
Undergraduate	17 (16,2)
Occupation	
Housewife	74 (70,5)
Student	3 (2,9)
Employee	23 (21,9)
Entrepreneur	5 (4,8)
Marital status	
Single	7 (6,7)
Young marriage (< 20 yrs)	9 (8,6)
Marriage at age $\geq$ 20 years	89 (84,8)
Number of children	
Do not have	19 (18,1)
1-2 child(ren)	70 (66,7)
>2 children	16 (15,2)

SD: Standard Deviation

**Table 2. Knowledge and attitudes of respondents on cervical cancer.**

Variable	N = 105 (%)
Ever heard of cervical cancer	100 (95.2)
Knowledge of the symptoms of cervical cancer	
Bleeding that does not fit the menstrual cycle	65 (61.9)
Foul odour vaginal discharge	62 (59.0)
Bleeding after menopause	14 (13.3)
Longer or more bleeding in the menstrual cycle	48 (45.7)
Do not know	23 (21.9)
Knowledge of the risk factors for cervical cancer	
HPV infection	56 (53.3)
More than one sex partner	85 (81.0)
Smoking	31 (29.5)
Coitus on early age	53 (50.5)
History of sexually transmitted diseases	70 (66.7)
Poor hygiene	38 (36.2)
Prolonged use of birth control pills (> 5 yrs)	5 (4.8)
Pregnant more than 5 times	4 (3.8)
Do not know	8 (7.61)
Knowledge of cervical cancer screening	
Ever heard of cervical cancer screening	61 (58.1)
Method used	54 (51.4)
Recommended age	54 (51.4)
Screening frequency	33 (31.4)
Knowledge of vaccines that can prevent cervical cancer	
Availability of HPV vaccine	48 (45.7)
The recommended age for HPV vaccination	
Bleeding that occurs outside the menstrual cycle is normal	89 (84.9)
Women should have their first child at the age of 20 years	72 (68.6)
Having more than 5 children makes a better family relation	95 (89.5)
Women who have multiple sex partners are prone to cervical cancer	101 (96.2)
Women should be checked every 3 years by health workers	85 (81)
We should avoid neighbours who have been diagnosed with cervical cancer	76 (72,4)
Attitude Statements	Number agreed (%)
You are willing to check if offered cervical cancer screening for free	94 (89,5)
You are willing to check if offered paid cervical cancer screening (Rp 400.000,00 -600.000,00)	18 (17,1)
You are willing that your child be vaccinated if offered free cervical cancer vaccination	92(87,6)
You are willing that your child be vaccinated if offered paid cervical cancer vaccinations (injections, Rp 500.000,00 -800.000,00/times)	20 (19,0)

HPV: Human Papilloma Virus

**Table 3. Adequacy of knowledge, attitudes and behaviour related to cervical cancer.**

Variable	Number (%)
Knowledge	
< 50% (poor)	62 (59)
≥ 50% (good)	43 (41,9)
Attitudes	
Favourable	89 (84.8)
Not favourable	16 (15.2)
Behaviour	
Been screened	23 (21,9)
Never been screened	82 (78,1)

Despite the poor knowledge, majority of the participants showed favourable attitude in receipt of services towards cervical cancer (89%). Only 21.9% of the participants had been screened before. Ninety-four percent (89.5%) of participants were willing to be screened if offered free. Majority of respondents told us that they had not known the availability of cervical cancer screening at the Makassar Health Centre. Some participants said they were embarrassed to get screened.

#### 4. DISCUSSION

Majority of the participants in this study had poor knowledge level (n=62). This is supported by other researches in developing countries which have similar sample characteristics [6, 7]. Majority of the participants were graduated from Junior High School, which was in accordance with the data published from the Jakarta Health Profile 2017 [4]. Higher level of education correlates positively with a higher level of awareness [8]. However, other researches with sample with higher education level also showed a suboptimal level of knowledge [5, 9]. Study conducted by Endarti *et al.* in Yogyakarta Province, Indonesia, also revealed the same socio-demographic as found in Makassar District [10]. This showed that women, in general, have poor knowledge about cervical cancer regardless of their educational status.

Most of the participants (95.1%) have heard about cervical cancer but only 61 participants (58.1%) acknowledged the way to prevent this disease by screening. Moreover, only 45% knew that cervical cancer can be prevented by vaccination. This is supported by researches done in India, South Africa, and Nigeria which showed that most women didn't know about either cervical cancer screening or vaccination [5, 11, 12].

Women in our sample population have access to be screened freely provided by the primary health care centre, but most of them still lack awareness regarding this issue. Mostly claimed they didn't know about the programme. Factors impacting the attendance of routine screening are lack of knowledge, low-risk perceptions of cervical cancer, lack of symptoms and fear and fatalism. Distances from their home to the health centre also contribute to the perception of disease [14]. This was supported by researches claiming that primary health care has a great impact in lowering the incidence and mortality rates of cervical cancer [14, 15].

Most of the participants knew at least one symptom (n=82) and one risk factor (n=97). The most often cited symptoms is "bleeding that does not fit the menstrual cycle" and "foul odour vaginal discharge". This is consistent with several studies conducted in the Maldives, and Ethiopia [11, 13, 14]. On the other hand, "multiple sexual partners" was the risk factor which was cited the most in the interview (n=81). This is in correspondence with many studies which showed the same results [5, 6, 9, 16]. Only half of participants can identify HPV infection as risk factors (n=56). This study showed that most women have misperception towards cervical cancer risk factors as 99.7% cervical cancers are associated with several HPV subtypes [17].

Despite the suboptimal level of knowledge, 89% of participants in this study showed favourable attitude towards cervical cancer. They were willing to be screened for cervical

cancer (n=94) or having themselves/their children vaccinated for HPV (n=92) for free. These findings are also consistent with several studies. This is an advantage as they already have the willingness to screen, they just need additional information regarding the programmes.

Most non-favourable attitudes are found towards paid screening of cervical cancer or paid HPV vaccination for their children. This issue might be caused by the lack of knowledge regarding HPV risk factors. This was according to the previous study in Indonesia where high cost of vaccine and screening was the barrier [10]. Research in Kenya showed that women who acknowledged risk for cervical cancer were tendinous to be screened even if they have to pay [18].

In this present study, 21.9% have screened for cervical cancer at least once. Despite the good attitude, fewer actions were taken towards cervical cancer screening. This is in conjunction with other studies that showed that a positive attitude doesn't correspond with good practices [5, 19, 20]. Several possible causes are misperception and lack information regarding the programs.

Limitation of this interview-based study was the sampling technique (purposive sampling).

#### CONCLUSION

Women in Makassar District Primary Health Care Centre are mostly housewives with an education level of Junior High School. Most of the participants were at reproductive age and were married. They still lack knowledge despite the good attitude towards cervical cancer, including the methods of prevention such as screening and vaccination. Most of them were willing to be screened if the prevention methods were given freely. The government and other health care institutions need more massive and efficient measures of health promotion regarding cervical cancer screening and prevention, especially in primary health care facilities which is the first health system easily approachable by most of the women.

#### ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

#### HUMAN AND ANIMAL RIGHTS

No animals/humans were used for studies that are the basis of this research.

#### CONSENT FOR PUBLICATION

Informed consent was obtained from all the participants.

#### AVAILABILITY OF DATA AND MATERIALS

The data that support the finding of this study are available on request from the corresponding author.

#### FUNDING

None.

## CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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Declared none.

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