

## THE CORRELATION BETWEEN ECONOMIC LEVEL AND CHILDBEARING AGE WOMEN'S INTEREST IN VISUAL INSPECTION WITH ACETIC ACID IN RENGEL PUBLIC HEALTH CENTER

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### ABSTRACT

*Cervical cancer screening is using VIA. This study was to analyze the correlation between economic level and maternal interest in VIA examinations in women of childbearing age. This was an observational quantitative analytic with a cross-sectional design research. The population was 171 women of childbearing age. The research sample was 120 according to the inclusion and exclusion criteria. The sampling technique was accidental sampling. The measuring instrument was a questionnaire. The results of the chi-square test showed that  $p=0.000$ , means that there was a correlation between economic level and maternal interest in VIA examinations at Rengel Tuban Health Center.*

**Keywords :** *Economic, Interests, VIA (visual inspection with acetate acid)*

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### INTRODUCTION

Cancer is a disease characterized by uncontrolled cell growth and eventually causes damage to normal healthy tissue. Cancer occurs when a cell begins to grow uncontrollably. There are many types of cancer, one of which is the most concern is cervical cancer. This cancer is growing rapidly and worryingly and is now the first killer cancer that attacks women in Indonesia. Efforts to overcome cervical cancer prevention are carried out routine examinations on a regular basis as an effort

to prevent and detect cancer early. Cervical cancer screening is using the VIA test (Visual Inspection of Acetic Acid).<sup>1</sup>

According to WHO (2012) cervical cancer is the second most common cancer in women living in low- and middle-income countries around 270,000 cases, more than 85% of these deaths are caused by cervical cancer. Meanwhile, in (2015) in developing countries the incidence of cervical cancer jumped higher by around 445,000 cases.<sup>2</sup>

The prevalence of cancer is quite high because cancer is mostly found in

women in developing countries. Indonesia is a developing country where every year no less than 170,000 cases of cervical cancer occur, making it the number 2 killer in Indonesia. Based on GLOBOCAN data, the International Agency for Research on Cancer (IARC), it is known that in 2012 there were 14,067,894 new cases of cancer and 8,201,575 cancer deaths worldwide. Based on the Basic Health Research (Riskesdas) in 2018, the prevalence of tumors/cancer in Indonesia showed an increase from 1.4 per 1,000 population in 2013 to 1.79 per 1,000 population in 2018. cervix. VIA is done to screen for cervical cancer.<sup>3</sup>

Based on BPJS data from 2014 to October 2016, 95,803 JKN-BPJS participants had undergone an VIA examination, while for the pap smear examination, 144,333 JKN-BPJS participants had done. Meanwhile, the total coverage of VIA and SADANIS examinations nationally from 2008-2016 was 1,623,913 people (4.34%) of the total target of 37.5 million Indonesian women. This shows the benefits of the JKN program, although not optimal, but beneficial for the community.<sup>4</sup>

The estimated number of cervical cancer sufferers in Indonesia in 2013 based on Riskesdas (2013), it is known that the provinces of East Java, Central Java and West Java have the largest estimated number of cervical cancer sufferers. The high number of cervical cancer sufferers in Indonesia is ideally balanced with the high number of providers (program implementers, consisting of general practitioners and midwives) and screening at the Puskesmas. Until 2013, there were 1,682 providers of early detection of cervical cancer in Indonesia with an estimated number of cervical cancer as many as 98,692 cases.<sup>5</sup>

A Preliminary Study conducted by researchers at the Rengel Health Center in November 2020 obtained data that out of 171 WUS at the Puskesmas, only 15 people participated in the VIA detection program. Based on the results of interviews, the low interest in checking the health of intimate organs is due to many factors, the first of which are interest, knowledge, economy, and fear.

The high prevalence of cancer in Indonesia needs to be observed with prevention and early detection measures that have been carried out by health service

providers. Cancer cases found at an early stage and receiving prompt and appropriate treatment will provide healing and longer life expectancy. Therefore, it is important to carry out regular check-ups regularly as an effort to prevent and detect cancer early. Screening is an early detection effort to identify diseases or disorders that are not clinically clear by using certain tests, examinations or procedures. This effort can be used quickly to distinguish people who appear to be healthy but suffer from a disorder. Cervical cancer screening is an VIA examination.

There are several possible factors related to the VIA examination, one of which is the economic level and the mother's interest. According to Lawrence Green (1980), behavior/interest is determined by three main factors, namely predisposing factors, enabling factors, and reinforcing factors. Predisposing factors are factors that can facilitate behavior, namely knowledge, attitudes, beliefs, traditions, systems, values held, education level, socioeconomic level; enabling factors are the availability of infrastructure and health facilities for the community, such as health centers, hospitals, posyandu, polindes, and so on while reinforcing

factors are factors that strengthen the occurrence of behavior including the attitudes and behavior of community leaders, religious leaders, health workers, laws and regulations. , regulations and so on.<sup>6</sup>

The low level of maternal interest and economic level regarding the VIA examination for cervical cancer screening is generally associated with the high incidence of cervical cancer. This is very concerning considering that cervical cancer is one of the cancers that can be prevented from an early age with early detection, one of which is the Pap smear.<sup>7</sup> VIA examination is used as a method of early detection of cervical cancer based on several factors including maternal interests and maternal economic level. Mothers will be interested in doing a certain treatment if it is supported by factors of desire, attitude, economic level, and education. Without an adequate economy, the mother has no interest in conducting examinations. So this is closely related to the correlation between economic level and mother's interest.

## MATERIAL AND METHOD

This was analytical research. Analytical research is part of observational research which is carried out through indirect observations without any treatment or intervention. The design used in this study was cross-sectional. This research was conducted at the Rengel Health Center, Tuban Regency in April-May 2021. This study analyzes the correlation between economic level (Independent Variable) and mother's interest in VIA examination (Dependent Variable) which is seen and measured once at the same time. The population in this study were 171 WUS who came to the Rengel Health Center, Tuban Regency. The sample in this study was 120 WUS at the Rengel Health Center, Tuban Regency which had been calculated using the Slovin sample formula (1960). Inclusion Criteria Inclusion criteria in this study include: WUS who are in the Rengel Health Center, Tuban Regency and

WUS aged 20 to 35 years, while the exclusion criteria in this study include: WUS who are not willing to be a respondent, WUS who has been diagnosed with Cervical Cancer and WUS who have physical disabilities (deaf and blind)

Data analysis using IBM SPSS v.25 with chi square test (Hidayat, 2010). The researcher chose to test the data using chi-square statistics on a sample to determine the correlation between the independent variable and the dependent variable on the ordinal data scale and the level of significance = 0.05. If the statistical results show  $p < 0.05$  then  $H_1$  is accepted which means there is a significant correlation between the variables and the degree of significance. Meanwhile, if the statistical test results show  $p > 0.05$  then  $H_0$  is accepted which means there is no significant correlation between the variables and the degree of significance.

## RESULT

**Table 1. Based on WUS Income at Rengel Health Center, Tuban Regency in 2021**

| No    | Income                     | f   | %      |
|-------|----------------------------|-----|--------|
| 1.    | Uncertain                  | 24  | 20.0 % |
| 2.    | $\geq 500.000 - 1.000.000$ | 36  | 30.0 % |
| 3.    | $\geq 1.000.000$ - above   | 60  | 50.0 % |
| Total |                            | 120 | 100%   |

*Source : Primary Data, 2021*

**Table 2. Identification of the Economic Level of Women of Childbearing Age at Rengel Health Center, Tuban Regency in 2021**

| No | Economic level<br>of Women of Childbearing Age | f   | %      |
|----|--|-----|--------|
| 1. | Less   | 24  | 20.0 % |
| 2. | Enough   | 36  | 30.0 % |
| 3. | Good   | 60  | 50.0 % |
|    | Total  | 120 | 100%   |

*Source : Primary Data, 2021*

Based on the table above shows that of the 120 respondents, it was known that most of them were 60 people with good economic level (50.0%).

**Tabel 3. Identification of Women of Childbearing Age's Interest in VIA Examination at Rengel Health Center, Tuban Regency in 2021**

| No | Women of Childbearing Age's<br>Interest in VIA Examination | f   | %      |
|----|--|-----|--------|
| 1. | Less   | 60  | 50.0 % |
| 2. | Enough   | 0   | 0 %    |
| 3. | Good   | 60  | 50.0 % |
|    | Total  | 120 | 100%   |

*Source : Primary Data, 2021*

Based on the table above, it is known that from 120 respondents it was known that 60 WUS interest in VIA examination was good (50.0%) and 60 WUS interest in VIA examination was less (50.0%).

**Table 4. Results of Analysis of the Correlation between Economic Level and Mother's Interest in VIA Examination in Women of Childbearing Age at Rengel Tuban Health Center**

| Economic Level | Women of Childbearing Age's<br>Interest in VIA Examination |      | Total |
|----------------|--|------|-------|
|                | Less   | Good |       |
| Less           | 24   | 0    | 24    |
| Enough         | 36   | 0    | 36    |
| Good           | 0  | 60   | 60    |
| Total          | 60   | 60   | 120   |
| p=0,000        |  |      |       |

Based on the table with the chi square statistical test, the results obtained a significance value of  $p=0.000$  so that it is smaller than the alpha value  $= 0.05$  ( $p = 0.000 < = 0.05$ ), which means that there was a correlation between economic level and mother's interest in VIA examination for Women of childbearing age at the Rengel Tuban Health Center.

## DISCUSSION

The economic level is an increase in prosperity and welfare as well as strengthening the regional and national economic structure. The point is economic growth which shows the extent to which economic activity will generate additional income in a certain period. In other words, the economy is said to have increased if the real income of the community in a certain year is greater than the real income of the community in the previous year.<sup>8</sup>

The economic level of a prosperous family is not like an all-in-one family, or a family with abundant assets, but prosperous family life is a condition of family life where members can enjoy a harmonious life, free from all quarrels and disputes, not overwhelmed by tension, anxiety, and despair. According to the BKKBN, based on the category, families can be grouped into five categories, namely: pre-prosperous, prosperous I, II, III, and plus families. Pre-prosperous families, namely families who have not been able to meet their minimum basic needs which include eating two or more meals a day, having different clothes for activities (eg for at home, work/school, and traveling), the widest part of the floor

of the house is not made of soil, have an income of less than Rp. 1,000,000 each month.

A prosperous family I, namely a family that can meet their minimum basic needs in terms of religion, clothing, food, housing, teaching, and very basic health services which include: at least once a week the family eats meat or fish or eggs, in the last year all family members obtain at least one new set of clothes, have a fixed income of at least Rp. 1.000.000 – Rp. 2,000,0000 per month. Prosperous family II, namely the family in addition to being able to meet the minimum basic needs, can also meet their social-psychological needs but has not been able to meet their development needs which include always setting aside money for savings, meeting children's formal education needs and providing basic facilities to children, always providing entertainment facilities at home, able to obtain health services, own and use transportation facilities, have a fixed income of at least Rp. 2,000,000 – Rp. 3,000,0000 per month.<sup>8-9</sup>

Prosperous family III, namely a family that can meet minimum basic needs, social-psychological needs, and at the same time can meet their development

needs but has not been able to be active in community business in the village or regional environment, which includes having family savings, can meet the formal educational needs of children and provide basic facilities to children, can replace entertainment facilities at home, have an income of Rp. 3,000,000 – Rp. 5,000,000 per month. Prosperous family plus, namely a family that has been able to fulfill all the effects mentioned above and at the same time can regularly participate in developing social activities and actively participate in such movements, which includes being able to fulfill all of the effects mentioned above and at the same time being able to regularly participate and be active. in social activities and have income > Rp. 5,000,000 each month.<sup>9</sup>

Economic Level Based on the City/Regency Minimum Wage is the minimum wage set by the Regency/City following Presidential Regulation No. 78 of 2015 concerning Wages. The UMK of Tuban Regency according to the Decree of the Governor of East Java Number 188/538/KPTS/013/2020 is Rp. 2,532,234.77. Based on the classification, BPS (Central Statistics Agency) distinguishes the opinion of the

population or economic level into four groups, namely low, medium, high, and very high. The low economic level is if the average income is IDR 1,500,000 per month, the medium economic level is the average income below IDR 1,500,000 - IDR 2,500,000 per month, the high economic level is the average income of IDR 2,500,000- IDR 3,500,000, and very high income, which is more than IDR 3,500,000 on average.<sup>10</sup>

The economic level is the family income obtained from a job that is used to meet daily needs where the economic level varies from one person to another. The economic level is divided into 3 categories, namely less, sufficient and good. But there is an opinion that says that the economic level can be distinguished from welfare, including pre-prosperous, prosperous I, II, and III. So this is in sync with the existing theory.<sup>10</sup>

Interest is a function of the soul to be able to achieve something. Interest is a power from within and appears from the outside as a gesture (Purwanto, 2011). The process of interest consists of motives (reasons, bases, impetus), the struggle of motives, namely Before deciding on the mind several motives are noble and low and here must be chosen, this decision is

very important which contains the choice between the existing motives and leaving other possibilities because it is impossible for a person to have various desires at the same time and act according to the decisions taken.<sup>10</sup>

Screening is an early detection effort to identify diseases or disorders that are not clinically clear by using certain tests, examinations or procedures. This effort can be used quickly to distinguish people who appear to be healthy but actually suffer from a disorder. Cervical cancer screening is done by the VIA test (Visual Inspection of Acetic Acid). Information about cervical cancer and initial screening with VIA examination is still poorly understood by most women of childbearing age in Indonesia. The low level of maternal interest and economic level regarding the VIA examination for cervical cancer screening is generally associated with the high incidence of cervical cancer. This is very concerning considering that cervical cancer is one of the cancers that can be prevented from an early age with early detection, one of which is the Pap smear.<sup>7</sup>

VIA examination is used as a method of early detection of cervical cancer based on several factors including

maternal interests and maternal economic level. Mothers will be interested in doing a certain treatment if it is supported by factors of desire, attitude, economic level and education. Without an adequate economy, the mother has no interest in conducting examinations. So this is closely related to the correlation between economic level and mother's interest. Based on the explanation above, it can be concluded that there is a correlation between economic level and mother's interest in VIA examination in WUS (Women of childbearing age) at the Rengel Tuban Health Center.

## CONCLUSION

The results of the research that was carried out at the Rengel Health Center, Tuban Regency in July 2021, it can be concluded that there is a correlation between the economic level and maternal interest in VIA examination in Women of childbearing age at the Rengel Tuban Health Center. It is hoped that further researchers can carry out research with a larger number of samples, different variables and can be used as education.

## REFERENCES



1. Rasjidi, Imam. (2009). *Deteksi Dini dan Pencegahan Kanker Pada Wanita*. Jakarta : CV Sagung Seto
2. World Health Organization. (2007). *Prevention. cancer control: knowledge into action: WHO guide for effective programmes: module 2*). Geneva: World Health Organization.
3. PUSDATIN. 2015. *Situasi Penyakit Kanker*. Jakarta: Pusat Data dan Informasi
4. Riset Kesehatan Dasar (Riskesdas). 2013. *Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2013*. Diunduh pada tanggal 13 Januari 2021  
dari <http://www.depkes.go.id/resources/download/general/Hasil%20Riskesdas%202013.pdf>
5. Departemen Kesehatan RI. (2010). *Kesehatan Reproduksi di Indonesia*: Jakarta
6. Notoatmodjo, Soekidjo. (2010). *Promosi Kesehatan Teori dan Aplikasinya*. Jakarta : Rineka Cipta
7. Komite Penanggulangan Kanker Nasional. (2015). *Draft Pedoman Nasional Pelayanan Kedokteran Kanker Serviks*. Jakarta: Kementerian Kesehatan RI. Diunduh tanggal 16 Maret 2021 dari [http://kanker.kemkes.go.id/guidelines\\_read.php?id=1&cancer=3](http://kanker.kemkes.go.id/guidelines_read.php?id=1&cancer=3)
8. Halmawi , Hendra. (2012). *Ekonomi Internasional dan Globalisasi Ekonomi*, Jakarta: Ghalia Indonesia, 2012, h. 98
9. BKKBN. (2013). *Profil, Hasil Pendataan Keluarga Tahun 2012*, Jakarta: Badan Kependudukan dan Keluarga Berencana Nasional Direktorat Pelaporan dan Statistik, 2013, h. 3
10. Purwanto. (2011). *INstrumen Penelitian Sosial dan Pendidikan*. Yogyakarta : Pustaka Belajar