THE CORRELATION FACTORS WITH BREAST CANCER OCCURRENCE IN DR. MOEWARDI HOSPITAL

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HUSNA DOLOHSAE
J210100074

HEALTH SCIENCE FACULTY
MUHAMMADIYAH UNIVERSITY OF SURAKARTA
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Surat Pernyataan Artikel Publikasi Ilmiah

Yang bertanda tangan di bawah ini:

Nama: Winarsih Nur W, S.Kep, Ns, ETN, M.Kep.

Pembimbing II
Nama: Rina Ambarwati, Ns. S.Kep.

Telah membaca dan mencermati naskah artikel publikasi ilmiah, yang merupakan ringkasan skripsi/tugas akhir dari mahasiswa:

Nama: Husna Dolohsae
NIM: J210100074
Fakultas: Ilmu Kesehatan
Program Studi: S1 Keperawatan Internasional
Judul Skripsi: Faktor-Faktor yang Berhubungan Dengan Kejadian Kanker Payudara Di RSUD Dr.Moewardi

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Surakarta, 27 September 2014

Pembimbing I

Winarsih Nur A, S. Kep., Ns., ETN., M. Kep

Pembimbing II

Rina Ambarwati, S. Kep., Ns
THE CORRELATION FACTORS WITH BREAST CANCER OCCURRENCE IN Dr. MOEWARDI HOSPITAL

Husna Dolohsae *
Winarsih Nur A, S.Kep, Ns, ETN, M.Kep. **
Rina Ambarwati, S.Kep, Ns.***

Abstract

Breast cancer is a disease which is not catching and most cancer is often happened at woman, the root because of by genetic factor, breast cancer represent the root cause death at woman. This research purpose to knowing the correlation factors to breast cancer occurrence in Dr. Moewardi Hospital. Research type is quantitative research by analytic research observational design with case control approach. Sample control is woman visitor doing Medical Checkup in medical operate on Dr. Moewardi Hospital and result of inspection clinic by medical energy and result show the normal breast. Election control done by purposive sampling, from status of patient or medical record. The sample research sum equal to 66 people, consisted of 33 cases and 33 controls. Hypothesis examination use chi square test and regression logistics analysis. Result research indicates that there is correlation between factors of family history related to occurrence of breast cancer at breast cancer patient. Besides knowable also that there is correlation between factor of history menarche related to occurrence of breast cancer at breast cancer patient as well as known that there is correlation between factor of history of hormonal contraception related to occurrence of breast cancer at breast cancer patient. Result of multivariate analysis known that correlation strength in this research from smallest biggest is age menarche (OR = 7,239), natural family history of breast cancer (OR = 5,013) and history of contraception hormonal (OR = 3,560). Node that factors of related to occurrence of breast cancer in Dr. Moewardi Hospital for example age of natural menarche family history of breast cancer and history of contraception hormonal.

Key word: breast cancer, menarche age, family history, hormonal contraception

INTRODUCTION

Breast cancer (Carcinoma Mamae) is a disease neoplasmagana coming parenchyma. Breast cancer is disease which is not catching and most cancer often happened at woman, the root causes genetic factor, breast cancer represent the root causes death at woman, and breast cancer is one of disease which have become the problem of society health in world. Every year counted 12 million people in all the world suffer the cancer and 7,6 million among others pass away because cancer (Antonsson et al, 2012).
Globacan representing one of the project from International Agency for Research on Cancer (IARC) which also report in 2008, that breast cancer occupy the first sequence, with the mean occurrence 1.7 million woman, and equal to 11.9 % per year pass away effect of breast cancer at all woman in the world (Globocan, 2012).

Cancerous case of breast found in Central of Java Province the year 2012 counted 4.206 case (37.09%). Prevalence cancer in Central of Java Province in 2012 is breast cancer and highest in Pekalongan town (Healthy Department, 2012).

Breast Cancer cases of many found at age 40 until 49 year, most case found at III stadium (46.2%). Proportion height at III stadium caused by a patient delay in searching medication (Indrati et al, 2009).

Causes factor the happening of definitive breast cancer till now not yet been known, but can be noted that by this disease cause have the character of the multifactorial which is influencing each other one another, that is genetic factor, environmental, virus, radiation in chest area, pattern eat uneven, hormone factor. About 75% woman suffering breast cancer do not know the existence of assorted of the risk factor ( Suherman, 2013).

Based on the data from Dr. Moewardi Hospital in 2011 up to 2013, patient of breast cancer amount to 5.781 people. In 2013 there are 4.443 patient of breast cancer mounting from 2012 that is counted 1.050 patient of breast cancer. While in 2011 patient of breast cancer of counted 288 patients. Amount of breast cancer patient in 2011 up to 2013 in Dr. Moewardi Hospital of Surakarta number 5.781 case, this represent the very high amount if referring at from report of health profile Central of Java Province that is equal to 4.206 case.

### UNDERLYING THEORY

#### Breast Cancer

Breast cancer represent the disease which is not catching and most cancer is often happened at woman, the root causes is genetic, breast cancer represent the root cause of death at woman effect of cancer. Every year counted 12 million people in all the world suffer the cancer and 7.6 million among others pass away because cancer. Result from handling of breast cancer progressively gratify, with the level of life death which is good progressively during last three decade (Houghton and David, 2012). If disease have expanded to continue, can break the bump at ulcers derma (Price, 2008).

According to Houghton and David (2012), telling there is all kinds of breast cancer risk factors occurrence are: 1) reproduce, 2) age 3) menarche history, 4) diet, 5) alcohol 6) genetic 7) family history 8) radiation 9) usage of intrauterine device hormonal, 10) tame breast disease, 11) mother suckling, 12) body more than 170 cm.

Houghton And David (2012) also say that the sign and symptom from breast cancer for example: 1) pain 2) lump 3) dilution putting 4) change putting, 5) changes in armpit.

According to Houghton and David (2012), there are some stadium of breast cancer shall be as follows:

- **Stadium 0**: Carcinoma In situ, there is no metastasis of gland of lymph regional, there is no metastasis.
- **Stadium I**: Tumor 2 cm, there is gland of lymph axila, there is no metastasis.
- **Stadium IIA**: Tumor 2 cm or more but not more 5 cm, there is gland of lymph axila, there is no metastasis.
- **Stadium IIB**: Tumor of had been more than 5 cm, there is no metastasis of gland of lymph regional, there is no metastasis
- **Stadium IIA**: Tumor of had been more than 5 cm, metastasis in
Moving ipsilateral of gland of lymph axila, there is no metastasis.

**Stadium IIB:** Tumor from various size measures by existence is direct to wall of chest or husk, metastasis in moving ipsilateral of gland of lymph axila.

**Stadium IICC:** All criterion from stadium 0 until stadium IIB, there is no metastasis.

**Stadium IV:** All criterion from stadium 0 until stadium IIB, metastasis

**Concept Framework**

**Independent Variable**

- Age factor
- Menopause history factor
- Alcohol consume factor
- Genetic factor
- Obesity and consume fat factor
- Radiation factor
- Factor of usage of intrauterine device hormonal
- Tame breast disease factor
- Exercise factor
- Reproduction factor

**Dependent Variable**

- Breast Cancer Happening

**Boldness:**

- : checked
- : not checked

**Research Hypothesis**

1. Ho: There is no correlation between family history factor to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.
   
   Ha: There is correlation between family history factor to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.

2. Ho: There is no correlation between menarche age ≤ 12 year factor to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.
   
   Ha: There is correlation between menarche age ≤ 12 year factor to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.

3. Ho: There is no correlation between factor of contraception hormonal usage history to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.
   
   Ha: There is correlation between factor of contraception hormonal usage history to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital.

**RESEARCH METHOD**

This research type is including quantitative research type by design part of this research represent the analytic observational research with case control approach. This research is executed in Medical Operate on the Dr. Moewardi Hospital and research time done start in June 2014. Control sample is: Woman visitor doing Medical Checkup in Medical Operate on the Dr. Moewardi Hospital and result of inspection clinic by medical energy and result of photo Rontgen show the normal breast. Election case - control done by purposive sampling, from status of patient or medical record. Sum up the sample research is equal to 66 people, consisted of 33 case and 33 control.
Instrument used to measure the family history factor, age menarche factor, history of contraception hormonal factor in this research is interview closed by which is made by a researcher self using Guttman method (Sugiyono, 2012). Questioner consisted of 5 question item and divided to become 4 subscales. The data analyze technique use univariat analysis purpose to submit the describing by totally from free component variable that is family history factor, age menarche, history of contraception of hormonal and also dependent variable that is factors of related to breast cancer occurrence, then bivariate analyze used to know the correlation between two variable using chi square test and multivariate analyze used to know the correlation from some independent variable to dependent variable using regression logistics analyze.

**RESEARCH RESULT**

**Respondent Characteristics**

Table 1.

<table>
<thead>
<tr>
<th>Age</th>
<th>Case</th>
<th>(%)</th>
<th>Control</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 – 39 year</td>
<td>10</td>
<td>30,3</td>
<td>20</td>
<td>60,6</td>
</tr>
<tr>
<td>40 – 49 year</td>
<td>11</td>
<td>33,3</td>
<td>13</td>
<td>39,4</td>
</tr>
<tr>
<td>50 – 59 year</td>
<td>9</td>
<td>27,3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60 – 69 year</td>
<td>3</td>
<td>9,1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

Mean±SD: 45,212±9,552, 38,697±5,223

*Source: Primary data in processing, 2014*

Based on the result of frequency distribution analysis age menarche age of breast cancer patient such as those which at table 3 above known that most responder experience of the menarche age < 12 year that is counted 28 woman or 84,8% when compared to a control group which its amount is slimmer that is counted 16 woman or equal to 48,5%. While breast cancer patient of menarche age > 12 year counted 5 woman or 15,2%. This amount is slimmer when compared to a group control that is counted 17 woman or 51,5%.

**Univariat Analysis**

1. **History of Breast Cancer Patient Family**

Table 2.

<table>
<thead>
<tr>
<th>Patient Family</th>
<th>Case</th>
<th>(%)</th>
<th>Control</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is</td>
<td>24</td>
<td>72,7</td>
<td>14</td>
<td>42,4</td>
</tr>
<tr>
<td>No there is</td>
<td>9</td>
<td>27,3</td>
<td>19</td>
<td>57,6</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source : Primary data in processing, 2014*

Based on result analyze the distribution frequency of family history breast cancer from breast cancer patient such as those which at table 2 above known that most responder have the family history suffering breast cancer that is counted 24 woman or 72,7% when compared a control group which its amount slimmer that is counted 14 woman or equal to 42,4%. While family history of breast cancer patient which nothing that experience of cancerous breast cancer counted 9 woman or 27,3%. This amount is slimmer when compared to a group control that is counted 19 woman or 57,6%.

2. **Menarche Age Breast Cancer Patient**

Table 3.

<table>
<thead>
<tr>
<th>Menarche Age</th>
<th>Case</th>
<th>(%)</th>
<th>Control</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 12 year</td>
<td>28</td>
<td>84,8</td>
<td>16</td>
<td>48,5</td>
</tr>
<tr>
<td>&gt; 12 year</td>
<td>5</td>
<td>15,2</td>
<td>17</td>
<td>51,5</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source : Primary data in processing, 2014*

Based on the result of frequency distribution analysis age menarche age of breast cancer patient such as those which at table 5 above known that most responder experience of the menarche age < 12 year that is counted 28 woman or 84,8% when compared to a control group which its amount is slimmer that is counted 16 woman or equal to 48,5%. While breast cancer patient of menarche age > 12 year counted 5 woman or 15,2%. This amount is slimmer when compared to a group control that is counted 17 woman or 51,5%.

3. **History of Hormonal Contraception Breast Cancer Patient**

Table 4.

<table>
<thead>
<tr>
<th>Hormonal Contraception</th>
<th>Case</th>
<th>(%)</th>
<th>Control</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Correlation Factors With Breast Cancer Occurrence in Dr. Moewardi Hospital
(Husna Dolohsae)

<table>
<thead>
<tr>
<th>Hormonal Contraception History</th>
<th>Case f (%)</th>
<th>Control f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is</td>
<td>25</td>
<td>45.5</td>
</tr>
<tr>
<td>No there is</td>
<td>8</td>
<td>24.2</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data in processing, 2014

Based on the result analyze the frequency distribution of hormonal contraception breast cancer patient history such as those which at table 4 above known that any responder follow the planning family program and majority of breast cancer patient use the method of contraception hormonal that is counted 25 woman or 75.8% when compared to a control group which its amount is slimmer that is counted 15 woman or equal to 45.5%. While patient of breast cancer using contraception non hormonal method counted 8 woman or 24.2%. This amount is slimmer when compared to a group control that is counted 18 woman or 54.5%.

Bivariat Analysis

Table 5.
The Analyze of Correlation between Family History with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital of Surakarta

<table>
<thead>
<tr>
<th>Family History with Breast Cancer Occurrence</th>
<th>Case f (%)</th>
<th>Control f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is</td>
<td>24</td>
<td>42.4</td>
</tr>
<tr>
<td>No there is</td>
<td>9</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

p value = 0.012
OR = 3.619
CI 95% = 1.290 – 10.150

Source: Primary data in processing, 2014

At table 5 seen that responder which its family experience of the more breast cancer that is 24 woman or 72.7% compared to with the responder which do not experience of the breast cancer that is 14 woman or 42.4%. While responder which its family do not experience of the slimmer bosom cancer at case group that is counted 9 woman or 27.3% compared to a responder which do not experience of the breast cancer that is 19 woman or 57.6%.

Statistic test result obtained value of chi square with significance value (p value) equal to 0.012 < 0.05. This matter means Ho refused and Ha accepted with the meaning there is correlation between family histories to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital. The analysis result known the OR value = 3.619 CI 95 = 1.290 - 10.150. Responder which its family experience of the breast cancer have the opportunity 3.619 suffer risk the breast cancer compared to its family do not experience of breast cancer.

Table 6.
The Analyze of Correlation between Menarche Age with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital of Surakarta

<table>
<thead>
<tr>
<th>Menarche Age</th>
<th>Case f (%)</th>
<th>Control f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 12 tahun</td>
<td>28</td>
<td>84.8</td>
</tr>
<tr>
<td>&gt; 12 tahun</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

p value = 0.002
OR = 5.950
CI 95% = 1.845 – 19.193

Source: Primary data in processing, 2014

At Tables 6 seen that responder of menarche age < 12 more year that is 28 woman or 84.8% compared to with the responder which do not experience of the breast cancer that is 16 woman or 48.5%. While responder of menarche age > 12 year slimmer at case group that is counted 5 woman or 15.2% compared to a responder which do not experience of the breast cancer that is 17 woman or 51.5%.
Statistic test result get obtained chi square value with the significance value (p value) equal to 0.002 < 0.05. This matter means Ho refused and Ha accepted, meaning there is correlation between history menarche age factor correlate to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital of Surakarta. The analysis result known the OR value = 5.950 CI 95% = 1.845 - 19.193. This means that menarche age < 12 year responder have the opportunity 5.950 suffer risk the breast cancer compared to menarche age > 12 year.

Table 7.

The Analyze of Correlation between Hormonal Contraception History with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital of Surakarta

<table>
<thead>
<tr>
<th>Hormonal Contraception History</th>
<th>Case f (%)</th>
<th>Control f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is</td>
<td>25 75,8</td>
<td>15 45,5</td>
</tr>
<tr>
<td>No there is</td>
<td>8 24,2</td>
<td>18 54,5</td>
</tr>
<tr>
<td>Total</td>
<td>33 100</td>
<td>33 100</td>
</tr>
</tbody>
</table>

p value = 0.011
OR = 3.750
CI 95% = 1.312 - 10,721

Source: Primary data in processing, 2014

At Tables 7 seen that responder having history of contraception hormonal more that is 25 woman or 75,8% compared to with the responder which do not experience of the breast cancer that is 15 woman or 45,5%. While responder which don’t have the slimmer contraception hormonal history its amount at case group that is counted 8 woman or 24,2% compared at responder which do not experience of the breast cancer that is 18 woman or 54,5%.

Statistic test result get obtained chi square value with the significance value (p value) equal to 0.011 < 0.05. This matter means Ho refused and Ha accepted with the meaning there is correlation between hormonal contraception histories factors related to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital of Surakarta. The analysis result known the OR value = 3.750 CI 95% = 1.312 - 10,721. This means that responder having history use the contraception hormonal have the opportunity 3.750 suffer risk the breast cancer compared to a responder which don’t have the history use the contraception hormonal or use the contraception non hormonal.

DISCUSSION

Demography

Based on the data collecting result known that majority of breast cancer patient which is being taken care of in Poli Operate o the Dr. Moewardi Hospital of Surakarta old age 40 - 49 year or as a whole majority of breast cancer patient old age above age 40 year equal to 69,7%. This research result in line with research result from Emy (2012) expressing that risk of breast cancer at woman old age more or is equal to 50 year is 6,5 times compared to a woman which old age less than 50 year.

And also research done by University California San Francisco (2006) expressing only 4,7% diagnose of breast cancer invasive and 3,6% diagnose of breast cancer insitu from woman group which old age less than 40 year. More than 70% diagnose of breast cancer from woman which old age 50 year or more.

Besides also support result of research from Desiyani (2009) indicating that to the number of patient which have age to 40 year because of this age risk hit a ever greater breast cancer.
cancer. Breast cancer start to rapidly grow the moment old age 40-49 year before woman enter the age more 50 year, while risk of breast cancer by herself expand until age 50 year with the opportunity comparison 1 among 50 woman. Biggest possibility of breast disease growth takes its rise at woman with the gyration old age 40-50 year.

**Family History at Breast Cancer Patient**

Result of univariat analysis known that most responder have the family history suffering breast cancer counted 72,7% when compared to a control group which its amount is slimmer that is counted 42,4%.

According to Houghton and David (2012), explaining that family having history of first stadium breast cancer, bilateral breast cancer, some consanguinity hit by impact in one generation, breast cancer in a few generation, can become the risk able to be endowed at the family, and cancer growth knew by related to certain syndrome.

Result of this research in line with research result from Trisnadewi (2013), her research indicating that majority of there is family with the breast cancer.

**Menarche Age Breast Cancer Patient**

Result of distribution known the majority of breast cancer patient experience of the menarche age < 12 year that is counted 84,8%; when compared to a control group which its amount is slimmer that is counted 48,5%.

This research result support research result from Anggorowati (2013) that menstruate age < 12 year by significance improve the risk of breast cancer. According to Maulina, dkk (2012), age menstruate earlier and overdue menopause relate to the duration presentation of hormone of estrogen and progesterone at woman having an effect on to process of proliferation network of including breast tissues. So also in line with research result from Indrati, dkk (2005) that age menstruate earlier that is < 12 year relate to the the duration presentation of hormone of estrogen and progesterone at woman having an effect on to process of proliferation tissues of including breast tissues. So, this matter can trigger the happening of breast cancer.

**Hormonal Contraception Usage History**

Result of frequency distribution analysis of hormonal contraception history of breast cancer patient known that any responder follow the planning family program and majority of breast cancer patient use the contraception hormonal method that is counted 75,8% when compared to a control group which its amount is slimmer that is counted 45,5%.

According to Mcphee and Maxine (2012), explaining that side effects from contraception pill can improve the risk of breast cancer counted a quarter multiply to fold it. Statement from this Mcphee as according to this research result where majority of responder of breast cancer patient use the contraception hormonal counted 75,8.

This research result in line with research result from Desiyani (2009), that pursuant to distribution of frequency of KB hormonal usage history at case group in the reality responder proportion using contraception hormonal at case group at most that is 23 people (76,7%). This matter as according to statement Winarto (2007) that contraception hormonal contains the hormone of estrogen substitution besides owning benefit to arrange the pregnancy, but also have the negative facet, that is
The Correlation Factors With Breast Cancer Occurrence in Dr. Moewardi Hospital (Husna Dolohsae)

high risk the happening of breast cancer.

Besides this research result in line with research result from Trisnadewi (2013) indicating that woman using estrogen or accept the therapy estrogen (using contraception hormonal) its significance risk to the happening of breast cancer, where during period of usage of contraception hormonal, woman have the risk 24% to breast cancer.

The Correlation between Family History Factors with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital

Result of bivariate analysis known that responder which its family experience of the more breast cancer that is counted 72,7% compared to with the responder which do not experience of the breast cancer only counted 42,4%. Statistical test result get obtained chi square value \( \chi^2 \) equal to 6,203 > \( \chi^2 \) tables (3,84) with the significance value \( (p \text{ value}) \) equal to 0,013 < 0,05. This matter means there is correlation between family history factors with the occurrence of breast cancer at patient with the breast cancer in Dr. Moewardi Hospital of Surakarta. This research result also express that woman having family history with the breast cancer higher risk 3,619 times to suffer the breast cancer compared to a woman which don't have the family history with the breast cancer

This research result as according to statement of Lanfranchi and Brind (2005) that woman owning consanguinity suffering breast cancer will have the higher breast cancer risk, especially half brother first level, motherly, sister or brother of woman or daughter. This risk mount if a woman have some first level consanguinity hit by a breast cancer, or if is have the first level consanguinity suffering breast cancer at young or both sides its breast. A woman owning gene of heritage mutation (including BRCA1 and BRCA2) improving risk of breast cancer by significance and have been reported by 5-10% case from entire breast cancer.

This research result in line with research result from Emy (2012) that from result analyze known there is correlation between family history with the occurrence of breast cancer. Research result Emy also express that mother which don't have the family history with the breast cancer higher risk 6,44 times do not to suffer the breast cancer.

This research result also as according to research result from Abidin (2014), where responder owning more clan experience of the breast cancer that is 18 people (36,0) compared to a responder which do not experience of the breast cancer that is 9 (18,0).

The Correlation between Menarche Age Factors with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital

Result of bivariate analysis for the correlation between factor of menarche age with the occurrence of breast cancer known that responder menarche age < 12 year more that is counted 84,8% compared to with the responder which do not experience of the breast cancer that is counted 48,5%. Statistical test result get obtained the chi square value \( \chi^2 \) equal to 9,818 > \( \chi^2 \) tables (3,84) with the significance value \( (p \text{ value}) \) equal to 0,002 < 0,05. This matter means there is correlation between factors of history menarche related to occurrence of breast cancer at breast cancer patient at Dr. Moewardi Hospital of Surakarta. The analysis result is also known that OR value = 5,950, its meaning menarche age responder < 12 year have the opportunity 5,950 risk
suffer the breast cancer compared to menarche age > 12 year.

Research result as according to statement from Houghton and David (2012), saying that there is all kinds of risk factors of breast cancer occurrence, one of them is history menarche where menstruating too first early or old age under 12 year or menarche lost time and menopause at older age or above age 50 year.

This matter also as according to statement from USCF (2006) that woman first menstruation at age less than 12 year hence exposure estrogen duration more and more the length and risk hit a breast cancer a few higher. At the time of a woman experience of the first menstruation, hence started by function of ovary cycle yielding estrogen. Sum up the exposure estrogen and progesterone at a woman during its life spans is trusted to represent the risk factor. Longer a woman exposure hence risk to be hit by a higher breast cancer also.

So also in line with research result from Anggorowati (2013) that at variable of menarche age < 12 year and menopause > 48 year, research result in harmony with research expressing that one of free variable which is pursuant to bivariate analysis have an effect on to occurrence of breast cancer is age menstruate < 12 year and age menopause > 48 year. Age menstruate < 12 year by significance improve the risk of breast cancer.

The Correlation between Usages of Hormonal Contraception Factor with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital

Based on the result analyse the bivariate known that responder having history of contraception hormonal more that is counted 75.8% compared to with the responder which do not experience of the breast cancer that is counted 45.5%. Statistical test result get obtained chi square value ($\chi^2$) equal to 6.346 > $\chi^2$ tables (3.84) with the significance value (p value) equal to 0.012 < 0.05. This matter can be interpreted that there is significance correlation between usages of contraception hormonal factor with the occurrence of breast cancer at patient with the breast cancer in Dr. Moewardi Hospital of Surakarta. This research result also expresses that woman having history of usage of hormonal contraception higher risk 3.750 times to suffer the breast cancer compared to a woman which doesn’t have the history of hormonal contraception usage. This matter is enabled because high hormone rate during a period of woman reproductive, especially is otherwise alternated by change hormonal because pregnancy, seems improve the opportunity of growing of cell which by genetic have experienced of the damage and cause the cancer. Woman using this drug for the time of old ones have the high risk to experience of the breast cancer before menopause. Cell which sensitive to excitement hormonal possible experience of the tame degeneracy change or become to raise hell.

Result of this research support with research result from Abidin (2014), where its research result is known that statistical test result by risk estimate obtained result as risk factor between contraception hormonal with the occurrence of breast cancer. Where OR value using contraception hormonal have the opportunity 3.431 suffer risk the breast cancer compared to which do not use the contraception hormonal.

The Analysis Correlation Factors with Breast Cancer Occurrence at Breast Cancer Patient in Dr. Moewardi Hospital
Result of multivariate analysis known those factors able to influence the happening of breast cancer for example can be caused by factor of family history suffering from breast cancer, factor of menarche age < 12 year and factor of patient history use the contraception hormonal. From result analyze the knowable multivariate that most dominant generate the risk of occurrence of breast cancer is menarche age. This matter is proven from value of OR of highest menarche age variable that is equal to 7.239 compared to a family history variable of breast cancer (5.013) and history of contraception hormonal usage (3.560).

This research result support the opinion from Houghton and David (2012), saying that there is all kinds of factor of risk of occurrence of breast cancer for example is reproduce factor, age factor, factor of history menarche, diet factor, factor often consume the alcohol, genetic factor, factor of family history, radiation factor, factor of usage of intrauterine device hormonal, factor of existence of tame bosom disease, mother suckling factor and body high exceeding 170 cm factor.

CONCLUSION AND SUGGESTION

Conclusion
1. There is correlation between factor of family history related to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital \((p \text{ value} = 0.012 \text{ dan OR } = 3.619)\).
2. There is correlation between factor of menarche age history related to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital \((p \text{ value} = 0.002 \text{ dan OR } = 5.950)\).
3. There is correlation between factor of contraceptin hormonal history related to occurrence of breast cancer at breast cancer patient in Dr. Moewardi Hospital \((p \text{ value} = 0.011 \text{ dan OR } = 3.750)\).

Suggestion
1. For Breast Cancer Patient
   Is expected a patient earn more patient and calm in face of cancerous of breast suffered, trying routine and healthier life do the medication of including doing chemotherapy.
2. For Public Society Especially Woman
   Is expected the importance of improving knowledge through the health education like often follow the counseling concerning risk factor, sign, way of detecting early, prevention and medication of bosom cancer and also can do to REALIZE self-supporting and also routinely do the medical checkup to hospital closest to do the its breast inspection
3. For Nurses
   Is expected can cooperate with the local area health institution to be more intensive in performing a related health counseling of breast cancer at woman. More intensively socialize pandemic of breast cancer either through pamphlet media, mass media and electronic media.
4. For Education Institutions
   Education institution shall supply all students with the science and knowledge about prevention program to be cancerous of breast especially in shares Poli Operate on Dr. Moewardi Hospital of Surakarta.
5. For Next Researcher
   Is expected can develop research result of similar to adding some other related factor with the occurrence of bosom cancer.

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The Correlation Factors With Breast Cancer Occurrence in Dr. Moewardi Hospital
(Husna Dolohsae)


Penerbit CV ALFABETA. Bandung.


* Husna Dolohsae: Students of S1 Nursing Program Study of Health Science Faculty of Muhammadiyah University of Surakarta. A Yani Street Tromol Post 1 Kartasura.

** Winarsih Nur W, S.Kep, Ns, ETN, M.Kep. Lecture of Nursing Program Study of Health Science Faculty of Muhammadiyah University of Surakarta. A Yani Street Tromol Post 1 Kartasura.

** Rina Ambarwati, S.Kep, Ns. : Lecture of Nursing Program Study of Health Science Faculty of Muhammadiyah University of Surakarta. A Yani Street Tromol Post 1 Kartasura.
The Correlation Factors With Breast Cancer Occurrence in Dr. Moewardi Hospital

( Husna Dolohsae )