Factors Affecting the Number of Antenatal Care Visit at Public Health Centre of Jayapura City by 2016

Riestiyani Manuputtya*, A.L. Rantetampangb, B. Sandjadja c

Abstract

Antenatal care is one of government priority programs to reduce maternal mortality and neonatal mortality which Indonesia had highest number of its in Asia. The aim of this study was to describe factors that affecting number of antenatal care visit at public health centre of Jayapura city by 2016. This study used cross sectional design with 253 of pregnant women who had visiting antenatal care services at public health centre of Jayapura city start from August until September 2016. The result found that factors affecting number of antenatal care visit such as predisposing factors include maternal age above 20th years (88.9%), highest of educational level (92.9%), not working or housewife (70.4%), low parity (62.8%), good of knowledge level (94.9%). Enabling factors include high income (67.2%), closer residence distance (89.3%), had health information (86.2%), and good healthcare facilities (96.4%). Reinforcing factor was husband and family support (93.3%). Bivariat analyzes by Chi Square found that age, parity, income and healthcare facilities had P<0.05 means that all factors affecting the number of antenatal care visit. More analyzing with Prevalence Ratio show us that work, income, distance between house to health care and health care facilities had PR > 1 that means all factor can increase number of antenatal care visit. Good healthcare facilities are factor that significant affecting to increase the number of antenatal care visit at public health centre of Jayapura city. It’s suggested to induce the quality and quantity of healthcare facilities of antenatal care at public health centre of Jayapura city.

Keywords: Antenatal Care; Visit; Public Health Centre.

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1. Introduction

Antenatal care (ANC) is one of the priority programs of the government in efforts to reduce Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR). MMR and IMR in Indonesia is still relatively high and still is one of the countries with high MMR and IMR in Asia. According to data from the World Health Organization (WHO), the number of maternal deaths in the world between 33-50%, which is closely related to the low level of health services gained during pregnancy while the contribution of the biggest causes of maternal death row is pre-eclampsia, eclampsia and hemorrhage antepartum [1]. Based on the Indonesian Demographic and Health Survey (IDHS) conducted by the Ministry of Health in 2012, the maternal mortality rate in Indonesia is still high at 359 per 100,000 live births. This figure is slightly down compared IDHS 1991 although the decline was not significant, amounting to 390 per 100,000 live births. Then, according to data from Demographic and Health Survey in 2012, Papua was included in the three provinces with the service delivery by health personnel lowest (33.31%) and maternal and infant mortality is high [2-4].

The indicators used to describe the access of pregnant women to antenatal care coverage, namely K1 (first visit) is the first contact of pregnant women with health professionals and K4 is four times or more contact with health professionals who have competence, according to the standard. Analysis performed by Green in Notoatmodjo [5,6] stated that the utilization of health facilities affected by behavioral factors (behavior causes) and behavioral factors beyond the (non behavior causes). Behavioral factors consist of predisposing factors are age, parity, marital status, ethnicity, education, work and knowledge, enabling factors are income, distance of residence and media information, also motivating factor which manifested itself in support of a husband or family [6, 7]. Jayapura city has 13 health centers with integrated service facilities antenatal care. The target number of pregnant women visit in 2016 amounted to 6,010. Based on data from the achievements of the Minimum Service Standards (SPM) Jayapura City Health Office 2015 for Visit Maternity coverage K4 is still low at 28.73%, the coverage of obstetric complications are handled by 82.14% and the deliveries by skilled health personnel by 92% [8]. Based on previous research and data City Health Department Jayapura above, this research will learn more about the factors that affect the number of antenatal care visits at the Puskesmas Kota Jayapura [8].

2. Materials and Methods

This type of research is an analytic research with quantitative approach. The design study is cross-sectional design (cross-sectional) study design is by making measurements or observations at the same time or at a time [9]. The study was conducted on August 19 to September 30, 2016. The material is only limited to the factors that influence the number of antenatal care visits at the Puskesmas Kota Jayapura in 2016. The study was conducted in 13 health centers in the service of antenatal care in the working area of the City Health Office Jayapura, Papua province. The independent variable (Independent Variable), the predisposing factors (age, education, occupation, parity, knowledge), enabling factors (expenses, the distance of residence, information media, health facilities) and factors (support of her husband and family). The dependent variable (Dependent Variable) is the number of antenatal care visits.
The samples in this study conducted in consecutive sampling that any samples met the study criteria included in the study through a certain period until the required number of patients are met. Secondary data were obtained from a cohort report / register pregnant women Puskesmas Kota Jayapura form of data the number of visits of pregnant women with the number of visits should be adjusted according to age of pregnancy. Data were analyzed and interpreted by a computer program to test the hypothesis using SPSS for Windows Release 23.0 with the stage of the analysis as follows:

**a. Univariate analysis**

Univariate analysis aims to describe the variables studied were performed on each variable to determine the proportion of each category in the study variables.

**b. Analysis Bivariat**

The bivariate analysis is a way to test the relationship and influence between independent variables and the dependent variable. Statistical methods are used to seeing the significance and magnitude of the relationship between variables was then tested Chi-Square (X²).

Further analysis is done by looking at the value Prevalence Ratio (PR) with the following provisions:

- If PR = 1, indicating that there is no relationship between the dependent and independent variables.
- If PR > 1, show that the independent variable is the dependent variable risk factors.
- If PR < 1, indicates that the dependent variable is a preventive factor on the dependent variable.

**3. Results and Discussion**

The study was conducted in 13 health centers in the service of antenatal care (ANC), which is in the city of Jayapura. Health Center Jayapura numbering 6,010 from 13 health centers. Jayapura city has a number of health personnel with adequate with 26 physicians, 79 midwives and 84 nurses spread across 13 health centers with antenatal care services were quite good. Data were collected on August 19 until September 30, 2016 13 health centers in the city of Jayapura by using a questionnaire given to pregnant women who visit health centers for antenatal during the study period.

Obtained from 253 pregnant women aged less than or equal to 20 years of 28 pregnant women (11.1%) and older than 20 years as many as 225 pregnant women (88.9%). This distribution is in accordance with previous research which states that the higher age of a pregnant woman, the more frequent visits for checkups [10]. Results of bivariate analysis show pregnant women older than 20 years had a higher percentage in the number of antenatal care visits was good that 170 pregnant women (86.7%) compared with the age below or equal to 20 years at 26 pregnant women (3, 3%). From the test results obtained statistical p value 0.039, we conclude there
is a significant relationship between age and the number of antenatal care visits was good in pregnant women at health centers Jayapura City. Further analysis by the PR value of less than 1 (0.29) shows that the age factor of 0.29 times led to a reduced number of antenatal care visits at the Puskesmas Kota Jayapura.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of ANC visit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not good</td>
<td>57</td>
<td>22.5%</td>
</tr>
<tr>
<td>Good</td>
<td>196</td>
<td>77.5%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 20 year</td>
<td>28</td>
<td>11.1%</td>
</tr>
<tr>
<td>&gt; 20 year</td>
<td>225</td>
<td>88.95%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>18</td>
<td>7.1%</td>
</tr>
<tr>
<td>High</td>
<td>235</td>
<td>92.9%</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not work</td>
<td>178</td>
<td>70.4%</td>
</tr>
<tr>
<td>Work</td>
<td>75</td>
<td>29.6%</td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less (≤2)</td>
<td>159</td>
<td>62.8%</td>
</tr>
<tr>
<td>Many (&gt;2)</td>
<td>94</td>
<td>37.2%</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less</td>
<td>13</td>
<td>5.1%</td>
</tr>
<tr>
<td>Good</td>
<td>240</td>
<td>94.9%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>83</td>
<td>32.8%</td>
</tr>
<tr>
<td>High</td>
<td>170</td>
<td>67.2%</td>
</tr>
</tbody>
</table>
Of the 253 respondents, there were 18 respondents (7.1%) with low education levels and 235 respondents with a higher education level (92.9%). It is caused by the high level of education affects the level of knowledge of a pregnant woman to have more frequent checkups [11]. From the test results obtained statistical p value of 0.229 and PR value is less than 1, it can be concluded that there is no meaningful distribution between the level of education of pregnant women with a number of good antenatal care visits. These results are consistent with research conducted by Pringgawati which showed no significant distribution between education and completeness of antenatal visits for higher education is not always a positive effect on health behavior is not good [12].

Of the 253 respondents, 178 respondents (70.4%) did not work and 75 respondents (29.6%) work. These results are consistent with previous research which states that pregnant women who do not work have more time to get checkups [13]. From the statistical test showed that there is no meaningful distribution between employment factor by the number of antenatal care visits either, namely in terms of p value of 0.767. This is according to research conducted by Fariji and Pringgawati which show similar results that there is no significant relationship between work and antenatal care visits [14,15]

Obtained 159 respondents (62.8%) with a parity bit and 94 respondents (37.2%) with the amount of parity a lot.
Fariji research suggests that there is a significant relationship between the number of children with ANC service utilization by the results of the analysis have the opportunity primiparas checkups 1.9 times compared to multiparous mothers [14]. Statistical test results obtained p value of 0.015 which indicates that there is a significant distribution among factors parity bit (the number of children less than 2) by the number of antenatal care visits was good. Subsequent analysis by looking at the PR value of 0.6, which means the value obtained parity factor slightly reduced 0.6 times the number of antenatal care visits at the Puskesmas Kota Jayapura in 2016. This is consistent with the theory according Rohmah reviews [16] is a partner in the family primiparas (new to have children) tend to be sharing in parenthood preparation and a desire to be a good parent is very strong.

240 of 253 respondents (94.9%) had a good knowledge and 13 (5.1%) had no knowledge of either. These results are consistent with earlier research that pregnant women who have a good knowledge about the health tend checkups [17]. The results of the bivariate analysis showed that pregnant women with good knowledge level has a higher percentage to visit antenatal care was good also in the amount of 94.9% or amounted to 186 pregnant women. Great p value 0.961 obtained by the PR value of 1, indicating that no meaningful distribution between knowledge factor by the number of antenatal care visits. Pregnant women with high incomes have the largest percentage of that 170 respondents (67.2%) of 253 respondents. Low revenue increase barriers to getting health priority over basic needs thereby slowing or causing neglect of antenatal care. With a large p value of 0.043, indicating that there is a significant distribution of factor income by the number of antenatal care visits in health centers Jayapura City. Further analysis by the PR value of 1.57 indicates that the factors causing the high income 1.57 times the number of antenatal care visits are better than the low income factor. Respondents with distance from the house to the nearby health services have the highest percentage of that 226 respondents (89.3%). Bivariate analysis shows the p value of 0.115, which means there is no meaningful distribution among the factors within the home to health services by the number of antenatal care visits. These results are consistent with previous research that says that there is no significant relationship between the distance of a place to stay with a visit K4 [18].

Pregnant women who get information about the health services had the largest percentage of which 218 (86.2%) visited antenatal care. Statistical analysis showed the p value of 0.960 indicates that there is no meaningful distribution between the factors of information about health services by the number of antenatal care visits pregnant women at health centers Jayapura City.

The largest percentage of respondents who consider pregnant women are health facilities are 244 respondents (96.44%) compared to pregnant women to health facilities is not good assumption by 9 (3.56%). From the test results obtained statistically significant p value of 0.016 p-value less than 0.05 indicates no significant distribution among the factors the number of health facilities with antenatal care visits in health centers Jayapura City. Further analysis with the Prevalence Ratio (PR) shows the result of 2.03 (more than 1) which showed that the factors of good health facilities will increase to 2.03 times the number of antenatal care visits compared with either no health facilities. Respondents who support her husband and the family that owns the largest percentage in the antenatal care visits to health centers, namely 236 (93.3%) of respondents compared with not getting the support of a husband is 17 pregnant women (7.7%). These results are consistent with previous research which
states that pregnant women are supported by their husbands or kin more regular checkups compared with pregnant women who are not supported by the husband / family [19]. Bivariate analysis shows the results p value of 0.192, which means that there is no meaningful distribution between husband and family support factor with the number of antenatal care visits in health centers Jayapura City.

4. Conclusion

Based on the analysis and discussion in this study, it can be concluded as follows:

1. Distribution of visits of pregnant women by predisposing factors showed that the majority of pregnant women who visited the health center Jayapura City in 2016 aged more than 20 years which amounts to 225 pregnant women (88.9%), had a higher education level as many as 235 (92.9%) of pregnant women, the majority of pregnant women do not work is numbered 178 pregnant women (70.4%), the majority of pregnant women have a parity bit in the amount of 159 (62.8%) of pregnant women and the majority of pregnant women have a level of knowledge good or as big as 240 (94.9%) of pregnant women.

2. Distribution of pregnant women visit by a supporting factor shows that the majority of pregnant women who visited the health center Jayapura City in 2016 with higher revenues in the amount of 170 (67.2%) of pregnant women, has a range of home health care close to that 226 pregnant women (89.3%), most of the health information that is equal to 218 (86.2%) of pregnant women and the majority of health facilities by pregnant women to be in both categories as many as 244 (96.4%) of pregnant women from 253 pregnant women who visit.

3. Distribution of pregnant women visit health centers to the city of Jayapura in 2016 based on the driving factors that pregnant women who get the support of her husband and family gained the largest percentage, namely 236 (93.3%) of pregnant women.

4. The independent variables that have a p-value less than 0.05 was age, parity, income and health facilities. This means that the variable age, parity, income and health facilities have a meaningful relationship with the distribution of the number of antenatal care visits at the Puskesmas Kota Jayapura in 2016. Further analysis of the prevalence ratio (PR) indicates that the variable occupation, income, distance of home health care and health facilities have PR value of more than 1 which means that these variables are factors that can increase the number of antenatal care in Puskesmas Kota Jayapura in 2016. of all the variables that have more than one PR value, PR value of the largest is the PR value of variable facilities health in the amount of 2.03 it indicates that the variable health facilities is the most dominant variable (p value <0.05, PR 2.03) affects the number of antenatal care visits in health centers Jayapura City in 2016.
References


