The Effect of Nurse Role, Work Motivation and Quality of Service on Satisfaction of Posyandu Elderly Patients in Mulia Puskesmas Puncak Jaya

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ABSTRACT

Background. The influence of the role of nurses, work motivation and service quality as well as making a benchmark in the successful implementation of handling patient satisfaction.

Research purposes. Knowing the role of nurses, service quality and work motivation on the satisfaction of elderly posyandu patients at Mulia Health Center.

Research methods. Quantitative analytic descriptors carried out from September to October 2018 and the proportionate stratified random sampling technique used with a sample of 80 respondents and used the SPSS 25 program.

Research result. Influencing the Role of Nurses on Satisfaction of Patients of Elderly Posyandu in a noble health center in Puncak Jaya Regency which is indicated by the value of t table (t<1,991) with a weak significant level below 0.05 which is 0.035. Influence of Work Motivation (X2) on patient satisfaction as indicated by the value of t table (t<1,991) with a strong significant level below 0.05, which is 0.000. Influence of Service Quality (X3) on patient satisfaction as indicated by the value of t table (t<1,991) with a strong significant level below 0.05, which is 0.000. Shows that there is an influence of the role of nurses, work motivation and service quality simultaneously on patient satisfaction as indicated by the F value of 202.830 with a significant level of 0.000 <0.05.

Keywords: The role of nurses, work motivation, service quality, patient satisfaction

INTRODUCTION

One important problem in the elderly is a problem related to reproductive health. Definition of reproductive health itself, namely reproductive health is a condition of physical, mental, and social well-being as a whole not merely free from disease or disability in all matters relating to the reproductive system, its functions and processes (ICPD Cairo, 1994). Older reproductive health problems include menopause, andropause, and problems with decreasing sexual function and potential. One of the government's efforts in providing health service facilities and the implementation of health efforts for the elderly was formed Posyandu for the elderly. Elderly Posyandu is an integrated service post for the elderly in a certain area that has been agreed upon, which is driven by the community where they can get health services. Elderly Posyandu is a development of government policy through health services for the elderly who implement it through the Puskesmas program by involving the participation of the elderly, families, community leaders and social organizations in the implementation. Posyandu is also a community-based activity forum to jointly gather all the strengths and abilities of the community to carry out, provide and obtain information and services as needed in an effort to improve community nutritional status in general. According to the Indonesian Ministry of Health (2005), elderly posyandu is a form of integration health services for the elderly at the village / kelurahan level in...
each puskesmas working area. The integration in the elderly posyandu is in the form of integration into the service motivated by the criteria of the elderly who have various kinds of diseases. The scattered Puskesmas certainly makes it easy for health services, so that every health center that wants to survive in the midst of the community needs to make efforts to make every consumer have a loyal attitude (Mowen and Minor, 2002). One of these efforts can be done by increasing patient satisfaction (Tjiptono, 2000, Spake et al 2003, Mallongi, et., al. 2014, 2016, and Thurau et. Al., 2002).

The creation of patient satisfaction will provide many benefits for the puskesmas itself, namely: establishing harmonious relationships between producers and consumers, forming word of mouth recommendations that will benefit an institution, and creating a good basis for repurchasing and creating customer loyalty (Tjiptono, 2000). However, efforts to create these conditions are quite difficult to do, because after all to create these conditions, good cooperation is needed between the elements within the puskesmas itself. So that until now there is still a lot of criticism from the community (patients) about the quality of services provided by the puskesmas.

The position of nurses in the health center is vital, because in addition to being a partner of doctors, nurses also become the first and longest contact with patients considering that nursing services are continuous. Once the importance of the role of nurses in an effort to improve patient satisfaction, it is important for nurses to show a good attitude in doing each service to patients. Because after all attitude is one of the factors that can be directly assessed by the patient, for it is important for the hospital management to periodically evaluate the quality of services performed by nurses. The importance of attitudes in providing services as an effort to satisfy patients is in line with the opinion of Hurriyati (2005), Kotler (2003), and Lupiyoadi (2001), all three agree that attitudes in providing services are one of the factors that influence customer satisfaction. Azwar (2005) states, that the components of attitude basically consist of three things, namely: cognitive (knowledge), affective (emotion), and psychomotor (behavior). If the three components become one entity, it will form a complete attitude.

Determining this whole attitude, knowledge, thoughts, beliefs and emotions play an important role. Knowledge will bring a nurse to think and try so that she is able to provide good service, in thinking this component of emotions and beliefs also works so that a nurse intends to provide good service, and is able to realize these conditions, for example ready at any time when needed, responsive to various complaints, and participate in implementing what the client is experiencing. The Puskesmas is very much needed in the community to create a healthy life which is an extension of the government to realize the programs that will be realized. In realizing government programs, the role of services and attitudes of nurses and nurses’ work motivation and satisfaction of puskesmas patients make it a benchmark for the successful implementation of treatment besides puskesmas facilities that need to be improved.

2. MATERIALS AND METHODS
2.1. Types of research
In conducting research, the type of research used is descriptive analysis method (descriptive analysis) quantitatively by processing data using SPSS 25 program software.

2.2. Location and Time of Research
a. Research Location
This research was conducted at the Mulia Health Center in Puncak Jaya district, where the research was conducted for 2 (one) month. This study was conducted in order to find out how the Role of Nurses, Motivation, Service Quality on Elderly Posyandu Patient Satisfaction at Mulia Puskesmas in Puncak Jaya district so as to provide constructivity in the continuity of
Mulia Jaya Health Center to determine policies and develop patient satisfaction levels. The assessment focused on all staff in the environment at the Mulia Puskesmas Puncak Jaya district, with complaints from patients who were not satisfied.

b. Research Time
The research was conducted in September to October 2018.

2.3. Population and Samples
a. Population
Based on Ridwan (2008: 54) Population is the totality of all possible values, both the results of calculating or quantitative and qualitative measurements on certain characteristics of complete objects. Population is a generalization area consisting of objects or subjects that become certain quantities and characteristics applied by researchers to be studied and then drawn to conclusions (Sugiyono, 2009). Population is the overall object of research, where one wants to examine all elements in the research area (Arikunto, 1998: 115). As for the population in this study, all elderly nurses and patients at the Mulia Health Center in Puncak Jaya district numbered 100 people.

b. Samples
The sample is part of the number and characteristics possessed by the population. If the population is large, and researchers are not likely to learn all that is in the population, for example due to limited funding of labor and time, researchers can use samples taken from that population. Determining sample size, namely the number of sample members is often expressed by sample size. The number of samples that 100% represent the population is the same as the number of members of the population itself. So if the population of 100 and the results of the study will be applied to 100 people without any errors, then the number of samples taken is equal to the total population of 75 people. The greater the number of samples approaching the population, the chances of generalization errors are smaller and conversely the smaller the number of samples away from the population, the greater the generalization error (generally applied). Then the numbers of samples to be taken in this study are 80 samples that will be used as respondents.

3. RESULTS
3.1. Characteristics of Respondents by Gender
The Characteristics of Respondents by Gender are as follows:
Characteristics of respondents based on gender can be seen in table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Sex</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>25</td>
<td>25.00%</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>55</td>
<td>55.00%</td>
</tr>
<tr>
<td>Number</td>
<td>80</td>
<td>100.00%</td>
<td></td>
</tr>
</tbody>
</table>

Based on the table above, from 80 respondents it is known that the sex of the Respondents 25 respondents (25.00%) were male while the remaining 55 respondents (55.00%) were women. It shows that the number of female respondents is more responsive following the Posyandu program at Mulia Health Center for health checks.

3.2. Characteristics of Respondents by age
Characteristics of respondents based on age can be seen in table 2.

<table>
<thead>
<tr>
<th>No</th>
<th>Age</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>56 s/d 60 year</td>
<td>40</td>
<td>40.00%</td>
</tr>
<tr>
<td>2</td>
<td>61 s/d 65 year</td>
<td>30</td>
<td>30.00%</td>
</tr>
<tr>
<td>3</td>
<td>66 year up</td>
<td>10</td>
<td>10.00%</td>
</tr>
<tr>
<td>Number</td>
<td>80</td>
<td>100.00%</td>
<td></td>
</tr>
</tbody>
</table>

Based on the table above, out of 80 respondents it is known that age between 56 to 60 years as many as 40 respondents (40.00%) have, ages between 61 to 65 years as many as 30 respondents (30.00%), ages between 66 years up to 10 respondents (10.00%). This shows that more respondents between the ages of 56 and 60 years are more likely to attend examinations at the Elderly Posyandu at Mulia Health Center.

3.3. Classic assumption test
a. Multicollinearity Test
The multicollinearity test was carried out to analyze multiple linear regression models to see whether the independent variable measured by the level of association (influence) relationship / influence between the independent variables through the magnitude of the correlation coefficient (r) had an effect. It is said that multicollinearity occurs if the correlation coefficient between independent variables is greater than 0.60 and vice versa if there is no multicollinearity if the correlation coefficient between independent variables is smaller than 0.60 or equal to (r ≤ 0.60).

A good regression model should not occur multicollinearity and the multicollinearity test in this study is to look at the value of Variance Inflation Factor (VIF). To overcome if there is multicollinearity, it must eliminate one or more independent variables that have a high correlation coefficient or that cause multicollinearity. According to Ghozali (2005) the cutoff value that is generally used to indicate the presence of multicollinearity is Tolerance > 0.1 and with a VIF value < 10.

### Table 3. Multicollinearity Test Result

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Zer-order</td>
<td>Partial</td>
</tr>
<tr>
<td>X1</td>
<td></td>
<td>-.100</td>
<td>.047</td>
<td>-.120</td>
<td>-.215</td>
<td>.035</td>
<td>.685</td>
</tr>
<tr>
<td>X2</td>
<td></td>
<td>1.185</td>
<td>.058</td>
<td>1.554</td>
<td>20.401</td>
<td>.000</td>
<td>.937</td>
</tr>
<tr>
<td>X3</td>
<td></td>
<td>-.394</td>
<td>.059</td>
<td>-.558</td>
<td>-6.660</td>
<td>.000</td>
<td>.780</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

From figure 3 above shows the output value in the Multicollinearity Test results as follows:

Using tolerance (a) and variance inflation factor (VIF), it can be seen that the tolerance to the large output of VIF counts variable X1 = 3.909 < 10, variable X2 = 7.302 < 10, variable X3 = 8.843 < 10 with variable tolerance values X1 = 0.256, Variable X2 = 0.137, Variable X3 = 0.113 above 0.10 it can be concluded that between independent variables does not occur multicollinearity.

b. Heteroscedasticity Test

Heteroscedasticity test is performed to test whether in multiple linear regression models variance inequality occurs from one observation to another. A good regression model is that homoscedasticity or heteroscedasticity does not occur. For heterogeneity test in this study with sig count value in table 4.12 Coefficients a on independent variable X1 = 0.035 < 0.05, X2 variable = 0.000 < 0.05, X3 variable = 0.000 < 0.05, it can be concluded that the regression model contains the existence of heteroscedasticity with an average value of sig calculated < 0.05.

### 3.3. Test F

a. Simultaneous Hypothesis Testing

To test this study used the F statistical test (F test) if the value of F count > F table value then H0 is rejected and Ha accept otherwise if the value of F count < Ftable value then H0 is accepted and Ha rejected the test results simultaneously can be seen in table 4.13 below this.

### Table 4. Simultaneous Test Results (Simultaneously)

<table>
<thead>
<tr>
<th>ANOVA*</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Regression</td>
<td>407,325</td>
<td>3</td>
<td>135,775</td>
<td>202,830</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>50,875</td>
<td>76</td>
<td>.669</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>458,200</td>
<td>79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Variabel (Y)
b. Predictors: (Constant), Variabel (X3), Variabel (X1), Variabel (X2)
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From table 4.13, the calculated F value is 202.830. By using a confidence level of 95% or \( \alpha = 0.05 \) then from the distribution table \( F = nk-1 \) (80-2-1) the value of 3.09 is obtained by comparing the value of F calculated with F table then F count (202.830) > F table (3.115). The decision is as follows:
1. \( H_0 \) is rejected and \( H_a \) is accepted, meaning that simultaneously the variable role of the nurse, work motivation and service quality has a very significant (significant) effect on patient satisfaction.

2. The testing criteria are if the value ‘Sig. smaller than the significance level (0.00 <0.05), it can be concluded that there is a significant influence between the Role of Nurses, Work Motivation and Quality of Service simultaneously on Patient Satisfaction.

### Table 4.5. Determination Coefficient Value

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>( F ) Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.969a</td>
<td>.940</td>
<td>.937</td>
<td>.0343</td>
<td>394,117</td>
<td>3</td>
<td>76</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>a. Predictors: (Constant), X3, X1, X2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dependent Variable: Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table 4.14 above shows that the coefficient of determination (R Square) of 0.940 equals 94.0% this means that the dependent variable is student work readiness (Y) can be explained by the independent variable Role of Nurses, Work Motivation and Service Quality is 94, 0% while the remaining 06.0% is explained by other independent variables.

### 3.4 Testing t

Testing the Role of Nurses, Work Motivation and Service Quality on Patient Satisfaction using the Statistical Test t (t test). If the value of t table is \( H_0 \) accepted. Conversely, if the value of t count < value of t table then \( H_0 \) is rejected. To see the t table in testing hypotheses in the regression model, it is necessary to determine the degree of freedom and this is determined by the formula:

\[
\text{Df} = n - k
\]

\( \rightarrow \) Where n = Number of observations in the data period.

\( \rightarrow \) Where k = Number of variables (free and bound).

In regression analysis used 2-sided probability, for example, look for distribution table value t sought at \( a = 5\%: 2 = 2.5\% \) (2-sided test) with degrees of freedom (df) n - k (n is the number of time periods in observation and k is the number of variables, then the results of partial hypothesis testing can be seen in table 4.15 below.

Then the results of the SPSS output above we can see where the value of t counts as follows:
1. Variable Nurse Role (X1) is greater than the value of t table (-2.150) <1.991 with a significant level below 0.05 which is 0.035.
2. Work Motivation Variable (X2) is smaller than t table value 20.401 > 1.991 with a significant level below 0.05, which is 0.000.
3. Service Quality Variable (X3) is greater than t table value (-6.660) <1.991 with a significant level below 0.05 which is 0.000.

Then the partial test decision making in regression analysis can be concluded as follows:
1. Variable Role of Nurse (X1) partially has a significant weak effect on Patient Satisfaction.
2. Variable Work Motivation (X2) is partially very influential with a strong significant level of Patient Satisfaction.
3. Service Quality Variables (X3) partially have a significant influence with a weak significant level of Patient Satisfaction.
Based on table 4.15 you can write the multiple linear regression equation as follows

\[ \hat{Y} = (1.629) + (-2.150) X_1 + 20.401 X_2 + (-6.660) X_3 \]

**4. DISCUSSION**

Hypothesis testing is statistical verification of all that has been hypothesized in theory-based research. To test the hypotheses that have been proposed and to detect the effect of independent variables on the dependent variable, multiple regression analysis methods are used.

Based on the results of the research of each independent variable on the dependent variable simultaneously and partially or the most dominant variable, a clearer picture of the research variables is obtained as follows:

- **H1**: The influence of Nurse's Role (X1) on patient satisfaction is indicated by the value of t table (-2.150 < 1.991) with a weak significant level below 0.05 which is 0.035.
- **H2**: The Effect of Work Motivation (X2) on patient satisfaction is indicated by the value of t table (20.401 > 1.991) with a strong significant level below 0.05, namely 0.000.
- **H3**: The Effect of Service Quality (X3) on patient satisfaction is indicated by the value of t table (-6.660 < 1.991) with a strong level of significance below 0.05 which is 0.000.

**5. CONCLUSION**

Based on the results of research and discussion, it can be concluded as follows:

1. **The Influence of the Role of Nurses on Satisfaction of Patients of the elderly Posyandu in the noble health center in Puncak Jaya Regency** which is indicated by the value of t table (-2.150 < 1,991) with a weak significant level below 0.05 which is 0.035.
2. **Effect of Work Motivation (X2) on patient satisfaction as indicated by the value of t table (20.401 > 1.991) with a strong significant level below 0.05, namely 0.000.**
3. **Effect of Service Quality (X3) on patient satisfaction as indicated by the value of t table (-6.660 <1,991) with a strong
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significant level below 0.05, which is 0.000
4. Shows that there is an influence of the role of nurses, work motivation and service quality simultaneously on patient satisfaction as indicated by the F value of 202.830 with a significant level of 0.000 <0.05
5. The dominant influential variable on patient satisfaction is the work motivation variable (X2) with a significant value of 0,000 and service quality (X3) with a significant value level of 0,000. This shows that work motivation (X2) and service quality (X3) have a positive and significant effect on patient satisfaction.
6. Demonstrate that the variables influence the role of nurses, work motivation and service quality on patient satisfaction as indicated by a significant level of 0,000 <0,05
7. Indicating indicators of nurse role variables have a significant weak effect so that the patient's satisfaction level decreases

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