The Effect of the Indonesian Ulama Council (MUI) Fatwa Number 4 of 2016 Concerning Immunization Toward Parents’ Decision in Carrying out Basic Child Immunization in Riau Province

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Abstract

Indonesia is one of the countries where its inhabitants practice the most Islam religion in the world, in which the issue of giving immunizations to children is an important concern for every Muslim parent. The issue of immunization is not only a government decision, in this case the ministry of health, but it is also a cooperation between Islamic institutions or organizations that must be carried out as an effort to raise the parents’ awareness to give immunizations to their children. Some of the reasons for refusing an immunization vaccine to their children are because the vaccine was made by Jews, did not respect God’s destiny, and was not halal. The results showed that the descriptive statistic test of X variable under the communication indicator had the strongest influence, meaning that it was expected that there would be more willingness of the parents to carry out immunization if the MUI socialized this fatwa. Furthermore, the descriptive statistics test of Y variable under the economic indicator was one of the reasons why parents avoid giving immunization even though the government provided posyandu in each village. For analysis data was collected, researcher use simple regression analysis. the result of analysis explain that the value of R was 0.195. R value declare that the correlation between the MUI Fatwa variable and the parents’ decision was low. Its mean that there was a positive significant relationship between the X variable and the Y variable. In addition, R Square value obtained was 0.038 or 38%. Its mean that the influence of the MUI fatwa variable on the parents’ decision variable was 38%, an for 62% was influenced by other factors which not researched in this study.

Keywords: immunization, MUI Fatwa, parents’ decision

Introduction

Health as an element of general welfare needs to be realized in accordance with the ideals of Indonesia as referred in the 1945 Constitution through sustainable national development based on Pancasila and the 1945 Constitution. The success of health development is more influenced by healthy available and human resource’s skill, and well-arrangement of health program with integrated planning supported by valid epidemiological data and information.

Immunization has been held in Indonesia since 1956. In 1977, immunization was expanded into the Immunization Development Program (PPI) as an effort for prevent of spreading some diseases infect by immunization (PD3I), like as Tuberculosis, Measles, Diphtheria, Tetanus, Pertussis, Polio and Hepatitis B. Immunization is an efforts to actively raise immunity of person in resist of disease with inserting a vaccine into the body, so he will not get sick or only experience minor illness if one day he is exposed to the disease.

Immunization is one of the priority activities of the Ministry of Health. In 2010, the Ministry of Health launched a strategy to achieve immunization activities through the Universal Child Immunization
Acceleration Movement (GAIN UCI), which is an effort to accelerate UCI in all villages in 2014 through an integrated movement by the government along with all levels of society and various related parties. The immunization program in Indonesia in 2014 targeted 100% of villages to receive UCI, and at least 90% of infants under one year had received complete immunizations. One of the immunizations is measles immunization. Its immunization was needed because it can increase immunity of population to eradicate, allay, or restrain all of diseases that can prevented by immunization (PD3I), (Ministry of Health, 2006).

Basic immunization is immunization given to the babies before 1 (one) year old. The following is the schedule table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Age</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0 Month</td>
<td>Hepatitis BO</td>
</tr>
<tr>
<td>2.</td>
<td>1 Month</td>
<td>BCG, Polio 1</td>
</tr>
<tr>
<td>3.</td>
<td>2 Month</td>
<td>DPT-HB-Hib 1, Polio 2</td>
</tr>
<tr>
<td>4.</td>
<td>3 Month</td>
<td>DPT-HB-Hib 2, Polio 3</td>
</tr>
<tr>
<td>5.</td>
<td>4 Month</td>
<td>DPT-HB-Hib 3, Polio 4</td>
</tr>
<tr>
<td>6.</td>
<td>9 Month</td>
<td>Measles</td>
</tr>
</tbody>
</table>

Table 1. Basic Immunization Schedule

Based on the table, newborn babies have received immunizations that show the importance of immunization for their immunity in order to avoid all kinds of diseases.

As an effort to avoid the doubts of parents in giving immunizations to their children, the Indonesian Ulama Council (MUI) issued the Indonesian Ulama Council Fatwa Number 04 of 2016 concerning Immunization, including a) The teachings in Islam strongly encourage people to always maintain health, which in practice can be done through preventive actions to avoid getting affected by illness and get a treatment whenever needed, so that the health is regained, or in other words by immunization; b) Immunization, as one of the medical measures to prevent certain diseases, is beneficial to prevent serious illness, disability and death; c) There is a rejection of some people against immunization, whether because of religious understanding that the practice of immunization is considered to precede destiny or because the vaccine used is doubtfully halal. It is in accordance with one of the Prophet's hadiths below:

“Narrated Abu Huraira, the Prophet (ﷺ) said: There is no disease that Allah has created, except that He also has created its treatment”. (Sahih al-Bukhari)

The number of male residents in Riau Province is more than the female population (sex ratio 106). The same comparison is found in all age groups up to age 69 years. In the 70-74 years old age group and above 75 years old, the population is dominated by women. Based on the composition of the population, the productive age group (aged 15-64 years) still dominates the percentage with the highest number in the age group of 20-24 years. Based on the Population Pyramid of Riau Province 2015, the largest population composition is the age group of 0-4 years, while the least population composition is the age group of 75+ year.

Based on the quantity of births by sex in Riau Province in 2015, a comparison of the rates of live infants and stillbirths is known where the percentage of death rate is 37.1% with the ratio of stillbirths
per 1000 births and 62.9% of live births. The regency / city with the highest infant mortality rate is Dumai City at 63 (13.52%), while the highest birth rate is in Pekanbaru City at 20,734 people (16.56%).

Some infant deaths are caused by several diseases that can actually be prevented by immunization including Measles, Polio and Hepatitis B.

From the reason on the text, researcher interested to do the research with title “The Effect of the Indonesian Ulama Council (MUI) Fatwa Number 4 of 2016 Concerning Immunization towards Parents’ Decision in Carrying out Basic Child Immunization in Riau Province”

**Statement of Problems:** From the background of the research problems, the researchers consider it important to formulate the problem, that is How is the Effect of the Indonesian Ulama Council (MUI) Fatwa Number 4 of 2016 Concerning Immunization towards Parents’ Decision in Carrying out Basic Child Immunization in Riau Province?

**Aims of the Research:** To find out the Effect of the Indonesian Ulama Council (MUI) Fatwa Number 4 of 2016 Concerning Immunization towards Parents’ Decision in Carrying out Basic Child Immunization in Riau Province and to find out whether there is an effect of the Indonesian Ulama Council (MUI) Fatwa Number 4 of 2016 Concerning Immunization towards Parents’ Decision in Carrying out Basic Child Immunization in Riau Province.

**Method**

The author uses quantitative research, research based on numbers (statistics).

**Data Collection Technique.** To obtain the data needed as the research basis, the researchers conducted data collection using several techniques, including:

1. **Observation;** Observation is an investigation carried out systematically and intentionally using the senses, especially the eyes, to the events directly. Here, the researchers conducted the observations directly in the field to get the data that is closely related to this research.
2. **Questionnaire Distribution;** The questionnaire is data collection using a list of questions distributed to research respondents regarding the research objectives.
3. **Interview;** Interview is a conversation conducted by the interviewer who asks a series of questions to the respondent directly related to the data needed. This technique was chosen because sometimes the data gathered from the questionnaire are not adequate yet.

**Data Analysis Techniques.** This study uses quantitative methods to analyze research data in generating conclusions / answers the problems. This research aim to test theories, construct facts, explain relationships among variables, describe a identities on statistical, and predict the result of study (Sarwono, 2011:19). Data was collected by questionnaire using Sugiyono Likert scale technique (2011: 107). Questionnaire as a instrument of study wa valid and reliable. When data was collected, the analysis of data can started. Data was collected with simple regression analysis. Analysis regression used to explain the relationship among variabel independent and dependent of research(Sugiyono, 2006 : 204). This analysis is used to test the effect of the Indonesian Ulama Council (MUI) fatwa N0. 4 of 2016 concerning Immunization towards the parents’ decision in carrying out Child Basic Immunization in Riau Province using statistical formulas that are processed through Spss 21.

**Classic Assumption Test.** The researchers utilize the classical assumption to find out whether the results of the regression etimation conducted are not bias to make sure that the regression results obtained are valid and used as the basis for testing hypotheses as well as drawing the conclusions. Those three classic assumption tests are:

**Multicollinearity Test.** Multicollinearity test used to determine how deviation from the classic assumption of multicollinearity. This test can be show relationship between the independent variables
in regression model. The prerequisite that must fulfilled in the regression model is they are not have multicollinearity. There are some test of methods that can used in the following:

1. See the value of the inflation factor (VIF) in the regression model;
2. comparing the value of the coefficient of individual determination ($r^2$) with the value of determination simultaneously ($R^2$), and
3. See at the eigenvalue and condition index values.

In this part, multicollinearity test doing with the see the value of the inflation factor (VIF) and comparing the value of individual determination coefficient ($r^2$) with determination’s value simultaneously.

**Heteroscedasticity Test.** Heteroscedasticity test aim to test an unequal variance in a regression model, from the residue of one observation to another. This test can be look at the presence or absence of patterns contained in the scatter plot graph. If the scatter plot graph forms a certain pattern, then there is heteroscedasticity. However, there is no heteroscedasticity if the point is spread.

**Autocorrelation Test.** The aim of auto correlation test to test a linear regression model has a correlation between the error in the t-period with the error of the intruder. If it has correlation, its means that there is autocorrelation. The consequence of auto correlation is the sample variant cannot describe the population variant, so the result of regression model is not used to estimate the value of certain dependent variables. Durbin-Watson test is usually used to tes the auto correlation.

**Simple Regression Test.** To analyze the data, the researchers Multiple Linear Regression, which a statistical method used to determine the relationship between the independent and dependent variables assisted by SPSS version 21 program. The multiple linear regression analysis makes it easy for the users to enter more than one variable, shown by equation:

$$Y = a + b_1X_1$$

**Explanation:**
- $Y$ = Parent’s Decision to Give Basic Child Immunizations
- $A$ = A constant
- $b_1$ = Regression Coefficient
- $X_1$ = MUI fatwa no. 4 of 2016 concerning Immunization

The measurement of variable in this research analysis was obtained from the answers to the questions asked during the interview.

**Determination Coefficient ($R^2$).** The determination coefficient ($R^2$) was used to find out the percentage of independent variables that at the same time can together explain the dependent variable. The determination coefficient is between zero until one. If the determination coefficient ($R^2$) = 1, it means that independent variable provide information needed to predict dependent variable. If the determination coefficient ($R^2$) = 0, it means that it’s the independent variable.

**Results and Discussion**

**Descriptive Statistics Test**

The variables used in this study include MUI fatma about immunization as $X$ variable and Parental Decision in basic immunization activities in children as $Y$ variable. Those two research variables will then be tested using descriptive statistics to show good data quality including: value minimum, maximum value, mean, standard deviation as shown in the table below.
### Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatwa</td>
<td>300</td>
<td>43</td>
<td>45</td>
<td>88</td>
<td>67.45</td>
<td>7.822</td>
<td>61.178</td>
</tr>
<tr>
<td>Decision</td>
<td>300</td>
<td>49</td>
<td>82</td>
<td>131</td>
<td>108.16</td>
<td>10.890</td>
<td>118.601</td>
</tr>
</tbody>
</table>

Valid N (listwise) 300

Table 1 shows that in the MUI Fatwa variable, the minimum answers of respondents were 45 and the maximum answers were 88, with an average total of 67.45 answers and had a standard deviation of 7.822. In the parents’ decision variable, the minimum answer of respondents is 82 and the maximum answer is 131, with an average total answer of 108.16 and has a standard deviation of 10.899. It shows that the quality of the data based on the mean value obtained is greater than the standard deviation value which indicates that the standard error of each variable is small.

### Data Quality Test Analysis

When data was collected, data was selected for its completeness and then analyzed. After that, researcher do the validity and reliability test. This test was used to carried out on all items of questions used to measure the research variables.

#### Data Validity Test

Validity test is used to measure the validity of a research instrument. The validity testing is carried out using SPSS software (version 17) and Pearson Bivariate Correlation (Pearson Moment Product). The test uses correlational analysis to get construct validity by correlating the score of each question item with the total score of all questions in the research questionnaire. If the correlation number obtained is greater than the critical number \( r_{count} > r_{table} \), the instrument is declared valid.

Based on the instrument validity testing, the Pearson bivariate correlation value (Pearson product moment) is positive and above the value of \( r_{table} = 0.113 \) which means that all questions can be declared valid. Based on the results of the validity testing conducted, all question items used to measure Variable X are valid used as research instruments. Pearson correlation value for 19 question items is greater than the value of \( r_{table} = 0.113 \). Therefore, all question items are valid and eligible to be used as the research instruments.

#### Reliability Test Results

Reliability testing aims to measure whether or not someone answers consistently to the question items used in a questionnaire. Reliability mean to understand that the questionnaire was true and can be trusted as a instrument which use to collected data. Reliability testing is performed using Cronbach’s Alpha technique, in which an instrument is considered reliable if it has a reliability or alpha coefficient of 0.6 or more.

#### Statistical t-Test Results

The results of the statistical t-test can be seen in table 4.5 If the probability t is less than 0.05 (<0.05), \( H_a \) is accepted and \( H_0 \) is rejected. However, if the probability of t is greater than 0.05 (> 0.05), \( H_0 \) is accepted and \( H_a \) is rejected.

Based on the results of the statistical t test in table 5.64 above, it can be seen that the calculated t-value obtained for the MUI Fatwa variable is 3.427 with a significance level of 0.000. The t-value obtained for the MUI fatwa variable is greater than the t-table value (1.725) with a significance value for
both variables is smaller than 0.05 (< 5%). It shows that Ha is acceptable, which means that the individual MUI fatwa variable significantly influences the decision of parents in giving immunization for the children. This result is in line with the theory purposed by G. R. Terry: decision making is an election based on certain criteria for two or more possible alternatives.

**Correlation Coefficient**

Correlation coefficient is an index or number used to measure the degree of relationship, including the strength of the relationship and the shape or direction of the relationship. (Hasan, 2010)

<table>
<thead>
<tr>
<th>Table 3. Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>decision</td>
</tr>
<tr>
<td>fatwa</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
</tr>
<tr>
<td>decision</td>
</tr>
<tr>
<td>fatwa</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

Based on the calculation in the table above, the correlation between the MUI fatwa variable is 0.195. It indicates that the relationship between variables X and Y is positive. It means that if the MUI fatwa is implemented properly, the parents’ decision to have basic immunization on the child will also be high (Notoatmodjo, 2007). The correlation is significant since the significance value is 0.000 < 0.05. It is in line with a research conducted by Andi Batari which affirmed that the mothers in An Nadzir congregation did not have adequate knowledge and attitudes towards giving immunizations. They also did not get enough information on the importance of giving immunizations.

**Simple Regression Analysis**

This study uses the enter method with the help of SPSS version 17 where all independent variables are used to explain the dependent variable. It utilizes a simple regression analysis model that uses the MUI Fatwa variable on immunization to explain the parents’ decision variable on the child’s basic immunization.

<table>
<thead>
<tr>
<th>Table 4. Simple regression results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Summary(^b)</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), fatwa  
\(^b\) Dependent Variable: decision

Based on the table above, the R value is 0.195. It shows that the correlation (relationship) between the MUI Fatwa variable to the parents’ decision is low, meaning that there is a positive significant
relationship between X variable and Y variable. In addition, R Square value obtained is 0.038 or 38%. It shows that the influence of the MUI fatwa variable on parental decision variable is 38%, while the remaining 62% is influenced or explained by other factors which are not included in this study.

Conclusions
This study provides a conclusion about "Fatwa of the Indonesian Ulama Council (MUI) Number 04 of 2016 concerning Immunization towards Parents' Decisions to Implement Basic Childhood Immunizations in Riau Province". The value of R Square obtained was 0.038 or 38% which showed the low influence of the MUI fatwa variable on the parent's decision variable, while the remaining 62% was influenced or explained by other factors not included in this study. This is inversely proportional to the theory that immunization is very important to avoid death. Immunization is giving the body immunity to a disease by putting something in the body so that the body is resistant to diseases that are endemic or dangerous to someone. The purpose of giving an immunity from immunization is to reduce the number of sufferers of a disease that is very dangerous to health and can even cause death in sufferers coupled with the role of a fatwa from the MUI to reinforce the importance of immunization.

References