The Relationship between Mother’s Knowledge About Early Development Stimulation of Toddlers Aged 3-24 Months And Inspection Results By Pre-Screening Questionnaire of Development (KPSP) in the Village of Ngadiluwih, Kediri Indonesia

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Abstract- Village Ngadiluwih is one of the 7 villages in Kediri District who has five toddlers with KPSP irregularities. The purpose of this research was to develop the questionnaire Investigation results of developments (KPSP) in the village of Ngadiluwih. Research methods design using cross sectional with a total population of 93 toddlers. This sampling using Proportionate Stratified Random Sampling, obtained 49 mothers who had a Toddler aged 3-24 months the respondents. This research used the form of a questionnaire about the mother’s knowledge of 3 - 4 months and KPSP 3 - 4 months ages. The research found that the mother's knowledge about the early development of the stimulation of a toddler aged 3-24 months mostly have a good knowledge of 87.75% and from the examination of the majority obtained KPSP toddler aged 3-24 months as having a dubious development as much as of 48.97%. This research uses statistical tests of Spearman Rank correlation with the value $\rho = 0.084$ ($\rho > 0.05$). Because the number of samples was over 30, it was compared to their significance and obtained $t_{\text{count}} = 0.577$ and $t_{\text{table}} = 2.01$ so $t_{\text{count}} (0.577) < t_{\text{table}} (2.01)$. It can be concluded that there was no significant correlation.

The KPSP in the village of Ngadiluwih was the main source of information on the development of KPSP in the village of Ngadiluwih.

Index Terms- Toddler aged 3-24 months, KPSP examination, knowledge, early stimulation.

I. INTRODUCTION

Activities of stimulation, early detection of growth disorders and development of comprehensive and coordinated childhood are organized in the form of partnerships between families (parents, caregivers and other family members), community (cadres, community leaders, professional organizations, non-governmental organizations, etc.). The indicators of success in guiding the growth and development of children not only increase the health and nutrition status of children but also the mental, emotional, social and independence of children develop optimally (MOH, 2006: 1-2).

The midwife as a health counselor plays a role in giving counseling about the growth and development of children properly. Enabling the existence of groups of maternal and child health enthusiasts (KPKIA) to implement KPSP as well as to demonstrate, and create learning classes for under-five mothers in preparation for implementation of KPSP, because on the basis of growth and development in childhood have certain characteristics that will normally be passed The age limit for each stage is not rigidly passed by the child (Nursalam, 2005).

Based on secondary data study that has been done, according to the health profile of East Java province in 2006, the number of children under five reaches 3,931,200 with coverage of Early Growth Detection of 1.807,945 (45.99%) (Dinkes Jatim, 2006). From the preliminary study data in the work area of Kediri Regency Health Office in 2013, the total number of all under-fives with 104,211 Early Drowsiness (DDTK) coverage is 8,951 (12,18%) with target to reach 90% that is 2010 target of all Toddlers number (DHO, 2013). Based on data obtained from Health Office of Kediri Regency there are 36 deviations of pre-screening questionnaire of development of children under five in Kediri District Health Center which is work area of Pare Puskesmas as many as 19 Balita, Ngadiluwih Public Health Center as many as 5 Balita, 5 Purwoasari Puskesmas, Tarokan 4 Balita, Sambi 1 Balita Health Center, Adanadan 1 Pita and 1 Puskesmas Pohjarak Health Center (DHO, 2013).

Researchers found that from 36 children under five KPSP deviations there are 5 KPSP deviations in the work area Puskesmas Ngadiluwih. The puskesmas is the second largest after the working area of Pare Puskesmas. Of 5 irregularities KPSP , it is found that irregularities occurred on gross motor skills in a vulnerable younger than 1 year were spread across 3 villages, namely 1 Toddler
Village Bangle, 1 Toddler in Desa Purwokerto and the largest in the village Ngadiluwih there are 3 toddler. Based on this background the author Intend to conduct research entitled "Knowledge of Mother's Relationship about Early Stimulation Development of Toddler with Result of Inspection of Growth Questionnaire (KPSP) at Toddler in Ngadiluwih Village Ngadiluwih Sub-district of Kediri Regency".

The objective of the research was to know the relationship between mother knowledge about early stimulation of under five development and result of examination of pre-screening questionnaire of development in toddler.

II. METHOD

This research uses correlation approach of Analytical Survey Cross Sectional (Nursalam, 2013: 162-163). Researchers looked for relationships of mother's knowledge about the early stimulation of early childhood development as an independent variable and the results of KPSP as independent variables at the same time (one time). The population in this study is the mother who has Toddlers aged 3-24 months in the village that is some 93 Ngadiluwih Toddler on 7 IHC. Sample in this study were mostly mothers with toddlers 3-24 months of age in the village of Ngadiluwih in Kediri. In this study, the sampling technique used is Proportionate Stratified Random Sampling For a sampling of each Posyandu done by coating using a lottery scrambles written Toddlers name and raffled an appropriate amount on each IHC. In this study, the independent variable mothers' knowledge of early stimulation Toddler development. In this study, the dependent variable is the result of pre-screening questionnaire examination of their rapidly developing n. This analysis using correlation Spearman Rank, this test is used to determine whether there is a relationship between two variables ordinal scale.

III. RESULT

The research found descriptive data includes characteristic of the samples and presented in the following tables below and be statistically as well.

Table 1 Distribution Frequency age of the women who have 3-24 Months Toddler

<table>
<thead>
<tr>
<th>NO</th>
<th>AGE</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt;20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>20-35</td>
<td>38</td>
<td>77,55</td>
</tr>
<tr>
<td>3</td>
<td>&lt;35</td>
<td>11</td>
<td>22,44</td>
</tr>
</tbody>
</table>

From the table above can be concluded that most Respondents aged 20-35 years ie 77.55% (38 people). Based on the education of mothers who have children aged 3-24 months can be seen in the table below:

Table 2 Frequency Distribution of Mother education with toddlers ages 3-24 months

<table>
<thead>
<tr>
<th>NO</th>
<th>EDUCATION</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary</td>
<td>4</td>
<td>8,16</td>
</tr>
<tr>
<td>2</td>
<td>Junior High School</td>
<td>21</td>
<td>42,85</td>
</tr>
<tr>
<td>3</td>
<td>Senior High School</td>
<td>18</td>
<td>36,73</td>
</tr>
</tbody>
</table>
From the table above, it can be concluded that most of respondents junior high education that is equal to 42% (21 people).

Based on the work of mothers who have children aged 3-24 months can be seen in the table below:

### Table 3 Frequency Distribution mothers work Toddlers aged 3-24 months

<table>
<thead>
<tr>
<th>NO</th>
<th>TYPE OF EMPLOYMENT</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Household</td>
<td>40</td>
<td>81,63</td>
</tr>
<tr>
<td>2</td>
<td>Private work</td>
<td>6</td>
<td>12,24</td>
</tr>
<tr>
<td>3</td>
<td>Teacher</td>
<td>3</td>
<td>6,12</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>49</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table above can be concluded that most Respondents work as housewives as much as 81,63% (40 people).

Maternal knowledge about early stimulation of development of children aged 3- 24 months in Ngadiluwih Village is presented in the following table:

### Table 4 Frequency Distribution of Capital Knowledge about development early stimulation Toddlers ages 3-24 months

<table>
<thead>
<tr>
<th>NO</th>
<th>KNOWLEDGE</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>43</td>
<td>87,75</td>
</tr>
<tr>
<td>2</td>
<td>Fair</td>
<td>6</td>
<td>12,24</td>
</tr>
<tr>
<td>3</td>
<td>Poor</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>49</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table above can be concluded that most Respondents have good knowledge that is equal to 87.75% (43 people).

The examination of KPSP in children aged 3-24 months in Ngadiluwih Village will be presented in the following table:

### Table 5 Frequency Distribution Inspection Results KPSP in Toddlers Age 3-24 months

<table>
<thead>
<tr>
<th>NO</th>
<th>CLASSIFICATION</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In Accordance</td>
<td>15</td>
<td>30,61</td>
</tr>
<tr>
<td>2</td>
<td>Dubious</td>
<td>24</td>
<td>48,97</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>49</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
From the table above it can be concluded that most toddlers 3-24 months of age examined in Ngadiluwih KPSP experience dubious development is equal to 48.97% (24 people).

Results of research on the relationship of mother's knowledge about early stimulation of development of children aged 3-24 months with result of examination of KPSP in Ngadiluwih Village will is presented in the following table:

<table>
<thead>
<tr>
<th>Parent Knowledge</th>
<th>In Accordance</th>
<th>Dubious</th>
<th>Irregular</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Good</td>
<td>13</td>
<td>20</td>
<td>10</td>
<td>43</td>
</tr>
<tr>
<td>2 Fair</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>3 Poor</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 6 Relationship of Knowledge Capital about Stimulus Outcome of Early Development of Toddlers aged 3-24 months with KPSP Inspection Results

Based on the above table we can see that respondents who have good knowledge and have children aged 3-24 months with the results of questionable KPSP examination amounted to 20 people.

Results were then tested using Spearman Rank correlation test. Then results was obtained, $\rho = 0.084$, as the number sample more than 30, Where the table does not exist, then the significance test use manual formula. Based on the results of the calculation of Spearman Rank with error level of 5% (0.05) of the obtained results $t = 0.577$. Then $t$ arithmetic compared $t$ table with $dk = n-2$, obtained $t$ arithmetic ($0.577$) < $t$ table ($2.01$), then $H_0$ is accepted and $H_1$ is rejected means no relationship of mother knowledge about early stimulation of development of Toddler age 3-24 Month with the result of KPSP examination in Ngadiluwih Village.

IV. DISCUSSION

Based on the results of research in table 4.4, mothers who have good knowledge of 87.75% (43 people), while the rest are knowledgeable enough that is equal to 12.24% (6 people). From the results of this study found that the mother's knowledge about early stimulation of development of Toddlers in the village Ngadiluwih District Ngadiluwih Kediri most of the respondents are knowledgeable.
A good mother knowledge about early stimulation of child under five development in Ngadiluwih Village is influenced by various factors one of them education, it can be seen from the result of research that is the respondents of junior high education equal to 42.85% (21 people), high school education Amounted to 36.73% (18 people), undergraduate education By 10.2% (5 people), educated elementary school 8.16% (4 people), and the rest are Diploma level that is 2% (1 person). Although in this study most of the respondents are well knowledgeable with junior high school education, it does not mean that education can be used as a reference as the only factor that can affect one's knowledge. Education does affect a person's attitude in receiving information from outside, but many factors can influence knowledge apart from education, such as work, age, interests, experience and culture. 

In this research, the knowledge of mother is said to be good because the factor which also influence the mother knowledge is age, from this research data got 77.55% (38 respondents) aged 20-35 years that is at reproductive age. According to Hartanto and Lubis in Zahro (2009) age 20-35 years in women is the reproductive age and are in the recommended childbirth. Reproductive age is very influential on knowledge about child development and child care practices. This is in accordance with Huclok in Wawan and Dewi (2011) which states that the more age, the maturity and strength of a person will be more mature in thinking and working, apart from the age of respondents knowledge can be obtained from experience factors. 

According to Simanjuntak (2011), experience is an event experienced by a person in interacting with his environment which is obtained through health counseling provided by health officials or cadres through events held in Ngadiluwih village area such as Posyandu park activity on every 12th day in every month and counseling directly given by the cadres through home visits. 

Information gained through counseling provided by health professionals is very influential on the knowledge of mothers because health workers are role models of society and have more knowledge about how to stimulate early development of toddlers is good and true. This is in accordance with Harlock's statement in Kosegaran (2012) that knowledge can also be obtained through education, self-experience, and others.

Nevertheless, in this study there are still a small number of respondents who have enough knowledge that is equal to 12.24% (6 people), from 6 Respondents there are 83.3% (5 people) with junior high education and 16.6% (1 person) with High school education. This is because the respondent cannot answer the statement on the questionnaire about the number 10 regarding the application in the early stimulation of the development of children under five aspects of KPSP include coarse motion, fine motion, speech and language, and socialization and independence.

From the above things the researcher believes that not all respondents who have low education also have low knowledge. Good knowledge is not influenced by the factors of education alone but also can be influenced by various factors, namely age and experience, because if only education is used as a reference in the care of children without experience, the stimulation provided by the mother in the less adequate and the toddler can not develop optimally.

Based on the results of the study, KPSP screening showed that there was a classification of under-five children who had the appropriate development of 31.61% (15 people), doubted 48.97% (24 people) and the remaining 20.4% (10 people) had deviations. Research in Rural Ngadiluwih obtained less than half of the respondents Toddler progressing dubious in terms of rugged and socialization independence movement compared with growth in accordance with KPSP. The occurrence of dubious developments due to several factors: the child is not cooperative when examined by the officer, the examiner is less approach to the child so that the child is afraid when done KPSP examination, this situation does not mean the child is in a dangerous condition. This study is in accordance with Amrullah's (2013) study which found more than half of respondents, 40 children (62.5%) from total 64 respondents who experienced dubious development due to lack of fulfillment in children, including the need to play.

Similarly, Ariani (2012) who argues that children who experience developmental delays may fail in school, this may be due to environmental factors that can interfere with growth and handling. From the above matters, the researcher argues that the role of parents, especially mothers, has a very important role in providing early stimulation of development in Toddlers because it is a facilitator that has an impact on the development of children to achieve optimal development according to the age stage.

The lack of knowledge of mother's knowledge about early stimulation of child under age 3-24 month development with result of examination of KPSP happened due to various factors, one of them internal factor that is still many mothers who are less aware of the development that must be achieved by their children in each age. In this research, mother knowledge is said to be good because of experience and information that have been obtained from health officer especially midwife at activity of Taman Posyandu which held every 1st day in every month in Ngadiluwih village about ways to do stimulation interesting, but in practice mother still can not apply directly to their children, so many found the development of toddlers who doubt. 

This is in accordance with the opinion of Mubarak in Simanjuntak (2011) stated that factors that affect one's knowledge is the experience by a person and information received by someone to gain new knowledge. In this study, although the knowledge of mothers mostly been said to be good but in examination KPSP it is still there. Respondents who experienced dubious development 48.97% (24 people) and deviant development of 20.41% (10 people) of 49 toddler respondents studied. This is not just a toddler is indeed a setback from the development that should, but influenced by various factors that can affect the examination of KPSP, among others, when the child's research looks shy, and prefer to play alone so do not want to follow the steps - the step of inspection Done by the examiner, the lack of approach done by the examiner so that the child is afraid during the examination.

Weaknesses are also present in this study: screening is performed only once, should be re-examined to avoid bias examination. Screening should be combined with diagnostic tools other development problems remembering less diagnostic value KPSP causing underdetection, there is a possibility of false negative results were correct. Subjects that are considered dubious in the assessment of the results of the KPSP should be re-examined 1-2 weeks later after the first examination to ensure the existence of developmental
delays. KPSP not the only tool that can be used to assess a child's development because KPSP itself translated from PQD (Parent Developmental Screening Test), developed from DDST (Denver Developmental Screening Test), whereas the gold standard used DENVER II which is a revision of the DDST (Ariani, 2012).

This study is in accordance with research conducted by Hidayati in Kosegaran (2013) which examines the relationship between mother's knowledge about the development of children with psychomotor development of children aged 3-5 years with no relationship. The absence of a relationship does not mean that the mother's knowledge does not affect the development of the child, it could be a mother who has a good knowledge about the development of children but has children with abnormal psychomotor development, or mothers whose knowledge about the development of children is not good but have children with normal psychomotor development.

From the results of this study, the researcher believes that there is no correlation between mother's knowledge about early stimulation of child under age 3-24 month with result of KPSP examination can be caused in conducting KPSP inspection only in one examination when this should be done after 2 weeks according to the age of the child to ensure the child's development is appropriate or indeed the child is actually experiencing irregularities so that further intervention can be done if the problem occurs.

V. CONCLUSION

Almost all mothers have a good knowledge about how to stimulate early development of toddlers, the mother knows every process of development that must be achieved by the child according to the age of the child.

Almost all children under five years of KPSP examination have experienced dubious developments.

There is no correlation between mother's knowledge on early stimulation of infant development aged 3-24 months with result of questionnaire of pre-screening of development (KPSP) in Ngadiluwih village.

REFERENCES


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