ANALYSIS OF FACTORS RELATED TO MOTHER'S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa¹, Darmawan², Susy Sri wahyuní³, Danvil Nabela⁴
¹,²,³,⁴Faculty of Public Health, Universitas Teuku Umar
E-mail: silviaarnisa264@gmail.com

Abstract
Measles is a disease that can be transmitted and is often experienced by children aged 5-13 years. The high rate of cases was 93 people who experienced measles in children in the child inpatient room at Subulussalam City Hospital. Measles is a paramyxoviridae group that enters the human body and then the virus will settle, multiply and can cause measles in children. Factors related to the incidence of measles in children are not immunized against measles, unhealthy homes, lack of mother's knowledge. This research was conducted aiming to analyze the factors related to the characteristics of the mother with the incidence of measles in children at Subulussalam City Hospital. This research method uses a quantitative descriptive analytic method with a cross sectional design through interview techniques using a questionnaire with 40 respondents. Based on the results of the independent variables that the age of the mother with the incidence of measles produces a P-value (0.017), education P-value (0.071), knowledge P-value (0.071), income P-value (0.896). The conclusion from the results the researchers have done at Subulussalam City Hospital can conclude that from the results of the P-value below <0.05 which is significant indicating that there is a relationship between several variables of maternal characteristics and the incidence of measles in children who have been tested based on univariate analysis and bivariate analysis .

Keywords: Measles, Children, Characteristics.

1. INTRODUCTION
Body Health World World Health Organization (WHO) also record around 30 thousand child Indonesia die consequence disease measles with complications disease other as in inflammation lungs, diarrhea, blindness, disturbance hearing, and encephalitis which damage brain, part big case measles attack children age pre school and age SD and number inventio n case and death because measles in Indonesia on year 20142018 which reported is 89,127 suspect measles with 22 death whereas results laboratory is19,392 positive measles Accord ing to data from (WHO), on decades final this 40 million child suffer measles (measles) from 481,000 child which infected measles 74% die world, kindly global measles Becomes so mething threat which very big because could infectious to people other. However almost en tirely could prevented through vaccination. But, according to (CDC) isknown that scope vacc ination inmanner global notyet realized from 86% with total 87 thousand case measles and 207,500 total death on year 2019 until Becomes 81% with case 128,000 people die on y ear 2021 asmuch 40 million child throughout world no get vaccine measles (Fatunnisa, 202 2).Service health aceh also record there is 1,100 case measles which could attack on children in province Very heavy that is Indonesia on year 2022, and request inhabitant for protect children for through fulfillmen t immunization to child. “Moment this there is 1,100 case measles on year 2022, the numbers themore many,” according
ANALYSIS OF FACTORS RELATED TO MOTHER’S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa, Darmawan, Susy Sriwahyuni, Danvil Nabela

to opinion head field Prevention and Control disease (P2P) Department of Health ace faith Muraman In Band aceh, on date (Surry, 2022). Based on study which conducted by Reni Spiritual about knowledge and attitude Mother which have child toddler to disease measles, state that from knowledge Mother enough as much 100 people (68.5%) and almost half attitude Mother good as much 74 people (50.7). Researcher conclude knowledge Mother enough because Mother understand about definition disease measles, method transmission happening disease measles, sign beginning and symptom disease measles, complications disease measles, prevention incidence disease measles, asas During experience disease measles to attitude Mother good because attitude which cognitive, affective and conative part big also Mother very agree with cleanliness environment, sign symptom disease measles and information as well as benefit from immunization measles. Reason main measles because infection virus *paratyxoviridae* which could infectious through air which has contaminated by *droplet* (saliva) people which has contaminated with incident disease measles, virus this not only attack on children but can also could attack people mature especially which not yet once get vaccine nor which not yet once caught measles moment still small (Reni, Nur & Sukmawati, 2020). Factors which related with incident measles on child that is no immunization measles because immunization is shape effort which could increase immunity to individual so that stand to disease which currently epidemic or dangerous for health around environment house no healthy as condition house which damp can Become wrong one indication house dirty so that causing emergence mold as well as bacteria virus develop breed in the house which could raises disease, knowledge Mother which not enough could as factor with incident measles because no understand gift immunization to child so that gift immunization Becomes no appropriate and can resulted no exists immunity in the body child so that child easy infected and attacked disease (Arianto, 2018). Data which obtained from room reporting takecare stay child as taking data beginning which obtained in HOSPITAL City Subulussalam found there is 37 case measles which happen on year 2019, 15 case measles which happen on year 2022 case measles which happen on year 2021 and 93 case measles which happe enhancement which very drastic on year 2022 (HOSPITAL City Subulussalam 2022). On moment survey beginning which conducted researcher about incident measles on child in room takecare stay child HOSPITAL City Subulussalam, researcher also do interview to a number of respondent for know factor which happen with incident measles on child that exists age Mother which risky, level education Mother which low, knowledge Mother which low, and income Mother which low. Based on problem on, so need conducted analysis is factors which which related characteristics Mother with incident measles on child in HOSPITAL City Subulussalam.

2. RESEARCH METHOD

Method study this use method study quantitative which aim for analyze factors which related characteristics Mother with incident measles on child in HOSPITAL City Subulussalam. In study this use method approach from data secondary and primary as type study descriptive analytic for serve data corresponding fact and information as well as could compare, analyze and evaluate data which collected in a manner cross sectional through technique interview with use questionnaire with 40 respondent as type study observational which analyze data variable which collected on one point time certain from whole population sample which has determined with technique taking sample random sample sampling use application SPSS with test chi-square for determine results from analysis on variable, population in study this is patient to care stay which in diagnosis in...
manner clinical suffer disease measles in HOSPITAL City Subulussalam. Based on collection data taken from room record medical and data reporting in room take care stay class III child as sample study there is around 85 patient which treated stay every the month. Study this held started on date 27 July 2022 in HOSPITAL City Subulussalam until 1 with 27 November 2022.

3. RESULTS AND DISCUSSION
3.1. Results Analysis Univariate

Table 1. based on distribution frequency variable independent with measure from data results age M other, education, knowledge and income on room take care stay child in HOSPITAL City Subulussalam.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>f</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20 Year risky</td>
<td>10</td>
<td>25.0%</td>
</tr>
<tr>
<td>&gt; 20 Year Not risky</td>
<td>30</td>
<td>75.0%</td>
</tr>
<tr>
<td><strong>Education Mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Tothetop</td>
<td>26</td>
<td>65.0%</td>
</tr>
<tr>
<td>Intermediate Down</td>
<td>14</td>
<td>35.0%</td>
</tr>
<tr>
<td><strong>Knowledge Mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>26</td>
<td>65.0%</td>
</tr>
<tr>
<td>Notenough Well</td>
<td>14</td>
<td>35.0%</td>
</tr>
<tr>
<td><strong>Income Mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 3,166,460 UMR</td>
<td>37</td>
<td>92.5%</td>
</tr>
<tr>
<td>&gt; 3,166,460 UMR</td>
<td>3</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>Incident Measles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>28</td>
<td>70.0%</td>
</tr>
<tr>
<td>Not Measles</td>
<td>12</td>
<td>30.0%</td>
</tr>
</tbody>
</table>

Based on table 1 on get from results univariate proportion respondent which own age Mother which no risky that is 75.0% more big compared with respondent age Mother which risky that is 25.0%, proportion respondent which own education Mother medium to the top that is 65.0% more big compared with respondent education Mother medium down that is 35.0%, proportion respondent which own knowledge Mother which good that is 65.0% more big compared with respondent knowledge Mother which not enough good that is 35.0%, proportion respondent which own income Mother which under UMR that is 92.5% more big compared with respondent income Mother which on UMR that is 7.5%, and proportion respondent which own incident measles that is 70.0% more big compared with respondent which no measles that is 30.0%.
ANALYSIS OF FACTORS RELATED TO MOTHER’S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa, Darmawan, Susy Sriwahyuni, Danvil Nabela

3.2. Results Analysis Bivariate

Table 2. Connection Among age Mother with incident disease measles on room take care stay child in HOSPITAL City Subulussalam.

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Incident Measles</th>
<th>Not Measles</th>
<th>Total</th>
<th>OR</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Measles</td>
<td>%</td>
<td>Measles</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Age Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 20 Year</td>
<td>4</td>
<td>40.0%</td>
<td>6</td>
<td>60.0%</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>&gt; 20 Year</td>
<td>24</td>
<td>80.0%</td>
<td>6</td>
<td>20.0%</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 2 Proportion respondent age Mother which no risky happen measles on child as big 80.0% more big compared proportion respondent age Mother which risky happen measles on child as big 40.0%, whereas proportion respondent age Mother which risky no happen measles on child as big 60.0% more big compared proportion respondent age Mother which no risky no happen measles on child as big 20.0%. OR=0.1 which meaning that age Mother no own opportunity risky on his son which caught measles on child compared with Mother which own age which risky and age which no risky no is factor risk happening measles on child, in a manner statistics exists connection age Mother with measles on child with score p.s value 0.017.

Table 3. Connection Among education Mother with incident disease measles on room take care stay child in HOSPITAL City Subulussalam.

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Incident Measles</th>
<th>Total</th>
<th>OR (95%CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Measles</td>
<td>%</td>
<td>Measles</td>
<td>%</td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate To the top</td>
<td>21</td>
<td>80.8%</td>
<td>5</td>
<td>19.2%</td>
</tr>
<tr>
<td></td>
<td>Intermediate Down</td>
<td>7</td>
<td>50.0%</td>
<td>7</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

Table 3 Proportion respondent education Mother medium to the top happen measles on child as big 80.8% more big compared proportion respondent education Mother middle down happen measles on child as big 50.0%, whereas proportion respondent education Mother medium down no happen measles on child as big 50.0% more big compared proportion respondent education Mother medium to the top no happen measles on child as big 19.2%. OR=4.2 which own meaning that Mother which own education low 4 time more chance his son caught measles compared with Mother which own education tall and education low is factor risk happening measles on toddler, but in a manner statistics no there is connection education Mother with measles on toddler with score p.s value 0.071.
Table 4. Connection Among knowledge Mother with incident disease measles on room take care stay child in HOSPITAL City Subulussalam.

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Incident</th>
<th>Measles</th>
<th>Not Measles</th>
<th>Total</th>
<th>OR</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td></td>
<td>(95%CI)</td>
</tr>
<tr>
<td>3. Knowledge Mother</td>
<td>Well</td>
<td>21</td>
<td>80.8%</td>
<td>5</td>
<td>19.2%</td>
<td>26</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>Not enough good</td>
<td>7</td>
<td>50.0%</td>
<td>7</td>
<td>50.0%</td>
<td>14</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4 Proportion respondent knowledge Mother good happen measles on child as big 80.8% more big compared proportion respondent knowledge Mother not enough good happen measles on child as big 50.0%, whereas proportion respondent education Mother not enough good no happen measles on child as big 50.0% more big compared proportion respondent education Mother good no happen measles on child as big 19.2%.

OR=4.2 which own meaning that Mother which own knowledge no good 4 time more chance his son caught measles compared with Mother which own knowledge good and knowledge not enough good is factor risk happening measles on toddler, but in a manner statistics no there is connection education Mother with measles on toddler with score p.s value 0.071.

Table 5. Connection Among income Mother with incident disease measles on room take care stay child in HOSPITAL City Subulussalam

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Incident</th>
<th>Measles</th>
<th>Not Measles</th>
<th>Total</th>
<th>OR</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Income Mother</td>
<td>&lt;3,166,460 UMR</td>
<td>26</td>
<td>70.3%</td>
<td>11</td>
<td>29.7%</td>
<td>37</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>&gt;3,166,460 UMR</td>
<td>2</td>
<td>66.7%</td>
<td>1</td>
<td>33.3%</td>
<td>3</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 5 Proportion respondent income Mother under UMR happen measles on child as big 70.3% more big compared proportion respondent income Mother on UMR happen measles on child as big 66.7%, whereas proportion respondent income Mother on UMR no happen measles on child as big 33.3% more big compared proportion respondent income Mother under UMR no happen measles on child as big 29.7%.

OR=1.1 which own meaning that Mother which own education low 1 time more chance his son caught measles compared with Mother which own income under UMR and income on UMR is factor risk happening measles on toddler, but in a manner statistics no there is connection income Mother with measles on toddler with score p.s value 0.896.
3.3. DISCUSSION

Age Mother

Results study show that proportion respondent with variable age Mother which no risky on incident measles 80.0% more big from age Mother which no risky on incident no measles 20.0%, whereas proportion respondent with variable age Mother which risky on incident no measles 60.0% more big from age Mother which risky on incident measles 40.0% . Score OR=0.1 which meaning that age Mother no own opportunity risky on his son which caught measles on child will but from statistics show there is connection which significant Among age Mother Among characteristics Mother with case measles on child in HOSPITAL City Subulussalam year 2022 with score P=0.017.

According to assumption researcher in study this age Mother to incident measles on child it seems enough influence, Thing this proven where age Mother which risky could affect on incident measles on child because lack of experience a Mother in look after child from level health for child so that case measles on child could just happen increase caused hit it measles on child.

Study this in line with results from study Srilina Brother Pinem, et al (2020) with title factors which influence visit toddler in gift immunization impact at posyandu Village Pertibi chubby Subdistrict Brand 2019 with show that as much 45 sample with results Test chi-square on age Mother to incident measles obtained results p=0.005 <a=0.05. Thing this statement that there is exists influence connection Among knowledge Mother with incident measles and results tester statistics also state Odds Ratio (OR) is 2.649 (Confidence intervals 95%=1.450-4,841) which means age Mother to disease measles have risk caught measles on child 2.64 9 time more many.

Education Mother

Results study show that proportion respondent with variable education Mother which medium to top on incident measles 80.8% more big from education Mother medium to the top on incident no measles 19.2%, whereas proportion respondent with variable education Mother medium down on incident measles 50.0% same big from education Mother medium down on incident no measles 50.0%. Score OR=4.2 which meaning that education Mother own opportunity risky 4 time more chance on his son which caught measles on child will but from statistics show no there is connection which significant Among education Mother Among characteristics Mother with case measles on child in HOSPITAL City Subulussalam year 2022 with score P=0.071.

According to assumption researcher in study this education Mother to incident measles on child, the more tall level education Mother so they will understand about case incident measles on child so that incident case could in prevent through factors which will causing happening measles, otherwise if education Mother which low so lack of understanding a Mother from incident measles which experienced by children and could increase case measles on child because lack of education which got by a Mother to guard as well as look after health child.

Study this in line with results from study Maria Ulfah, et al (2015) with title factors which related with incident incident disease measles on toddler in Subdistrict Bekasi East City Bekasi with show that as much 61 sample with results Test chi-
square on education Mother to incident measles obtained results p=0.063 >α=0.05. Thing th is state that no there is exists influence connection Among knowledge Mother with incident measles and resultstester statistics also state Odds Ratio (OR) is 15,907 which means Mother with education low to disease measles have risk child will caught measles 15,907 time more many compare d Mother with education tall to disease measles.

Knowledge Mother

Results study show that proportion respondent with variable knowledge Mother which good on incident measles 80.8% more big from knowledge Mother which good on incident no measles 19.2%, whereas proportion respondent with variable knowledge Mother which not enough good on incident measles 50.0% same big from knowledge Mother which not enough good on incident no measles 50.0%. Score OR=4.2 which meaning that knowledge Mother own opportunity risky 4 time more chance on his son which caught measles on child will but from statistics show no there is connection which significant Among knowledge Mother Among characteristics Mother with case measles on child in HOSPITAL City Subulussalam year 2022 with score P=0.071. According to assumption researcher in study this knowledge Mother to incident measles on child that is knowledge Mother obtained from experience as well as information which obtained somebody, so knowledge the will could change method pattern think somebody so that Act he did could develop from previously not enough understand to case measles and how factor which could influence happening measles on child.

Study this in line with results from study Mrs Giarsawan, et al (2012) with title factors which influence incident measles in region Public health center Tejakula I Subdistrict Tejakula districts Buleleng show that as much 46 sample with results Test chi-square on knowledge Mother to incident measles obtained results p=0.056>α=0.05. Thing th is state that no exists influence knowledge Mother to incident measles and results tester statistics also state Odds Ratio (OR) is 10,200 (Confidence intervals 95%=2,620-39,717) which means Mother with knowledge to disease measles low have risk child will caught measles 10,200 time more many compared Mother with knowledge to disease measles tall.

Income Mother

Results study show that proportion respondent with variable income Mother which under UMR on incident measles 70.3% more big from income Mother which under UMR on incident no measles 29.7%, whereas proportion respondent with variable income Mother which on UMR on incident measles 66.7% more big from income Mother which on UMR on incident no measles 33.3%. Score OR=1.1 which meaning that income Mother own opportunity risky 1 time more chance on his son which caught measles on child will but from statistics show no there is connection which significant Among income Mother Among characteristics Mother with case measles on child in HOSPITAL City Subulussalam year 2022 with score P=0.896. According to assumption researcher in study this income Mother to incident measles on child it seems no influence because total respondent more many income Mother under UMR compared income Mother which on UMR. Thing this no own influence big to incident measles b
ANALYSIS OF FACTORS RELATED TO MOTHER’S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa, Darmawan, Susy Sriwahyuni, Danvil Nabela

Case measles can happen consequence from method pattern foster to child as well as method how a Mother which can in guard health his son.

Study this line with results from study Wulan Marniasih, et al (2012) with title factors which relate with incident measles on region work Public health center natar Regency Lampung South year 2012 with show that as much 60 sample with results Test chi-square on income Mother to incident measles obtained results p=0.770 >α=0.05. Thing this state that no there is exists influence connection Among knowledge Mother with incident measles.

4. CONCLUSIONS AND SUGGESTIONS

4.1. CONCLUSION

Based on results study which conducted in HOSPITAL City Subulussalam to 40 respondent, factor which own connection significant with incident measles on child in HOSPITAL City Subulussalam that is age Mother (p=0.017, OR=0.167) whereas which no own connection which significant education Mother (p=0.071, OR=4.200) knowledge Mother (p=0.071, OR=4.200) income Mother (p=0.896, OR=1,182) to incident measles on child in HOSPITAL City Subulussalam.

4.2. SUGGESTION

Recommended for party power health so that could increase communication information and education for increase knowledge Mother about change pattern think as well so that more could increase awareness in importance health for child in effort decline number incident disease measles on child for increase level health child so that hope free from case disease incident measles on child could corresponding with achievement decline case.

REFERENCES


Dinengsih, S. (2018). Connection Among education, knowledge, Support family and...
role power health with obedience Mother in do immunization base on baby age 0-12 month in village Wow Regency Lebak Bulus Province Banten https://jurnal.ukh.ac.id/index.php/JK/article/view/281


ANALYSIS OF FACTORS RELATED TO MOTHER’S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa, Darmawan, Susy Sriwahyuni, Danvil Nabela


Spiritual R., Nur N., & Sukmwawati (2020). Knowledge And Attitude Mother Which Have Child Toddler About Disease Measles, Journal Health Saelmakers Prime, EISSN 2 61-6571 Volume 3 Number 1


ANALYSIS OF FACTORS RELATED TO MOTHER'S CHARACTERISTICS AND MEASLES CASES IN CHILDREN AT SUBULUSSALAM CITY HOSPITAL IN 2022

Silvia Arnisa, Darmawan, Susy Sriwahyuni, Danvil Nabela