

# Exclusive Breast Feeding Influence with Growing Hibiscus in Infants in Biak Numfor Regency Ridge Clinics – Province of Papua

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**Abstract:** *Introduction:* Baby is a newborn child up to the age of 1 year and experience the process of growing and development. The process took place rapidly and strongly influenced by the environment, however lasted very short and cannot be retried so referred to as the "golden age". This research aims to know the influence of Exclusive breast feeding with Growing and development of infants in the Clinics of Biak-Numfor Papua Province. Methods the study was a prospective cohort study. The population of this research is infants aged 4 – 6 months in Clinics of Biak Numfor Papua Province at year 2015 as many as 100 people. Sample as many as 62 people with sampling Purposive Sampling basis. The data were analyzed by univariate frequency distributions and bivariate T Test by using Independent test. The results showed that for the characteristics of the age of the mother, the mother's job and education of mothers against breast feeding exclusively shows no significant relationship with value ( $p > 0.05$ ). There is a significant relationship between the growth of weight, length, head circumference and circumference of the upper arm with Exclusive breast milk. Based on statistical tests there is a significant relationship between growths with breastfeeding exclusive with value ( $p < 0.05$ ). There is a significant relationship between the development of motoric coarse, fine motoric, social independence and speak the language and test statistics incur value ( $p < 0.05$ ).

**Keywords:** Breast Milk Exclusively, Normal Growing and Development

## 1. Introduction

Baby is a newborn child up to the age of 1 year and experience the process of growing and development. The process took place rapidly and strongly influenced by the environment, however, lasted very short and cannot be retried so referred to as the "golden age" (*golden period*) (<http://jurnal.fk.unand.ac.id>).

Baby need fresh breast feeding, Exclusive breast feeding in a way that is given a baby breast milk without additional other liquids such as milk formula, lemon tea, honey, water, mineral water, and without additional solid foods, such as bananas, papayas, milk, biscuits, porridge rice, and the team began to be born until the age of 6 months. The baby gets breast milk exclusively nor only the best investments, but also the future Savior of the nation (Selasi 2009).

Baby is a newborn child up to the age of 1 year and experience the process of growing and development. The process took place rapidly and strongly influenced by the environment, however, lasted very short and cannot be retried so referred to as the "golden age" (*golden period*) (<http://jurnal.fk.unand.ac.id>). Baby need breast feeding milk (ASI), Exclusive breast feeding in a way that is given a baby breast milk without additional other liquids such as milk formula, lemon tea, honey, water, white water, and without additional solid foods, such as bananas, papayas, milk, biscuits rice porridge, and the team began to be born until the age of 6 months. The baby gets breast milk exclusively nor only the best investments, but also the future Savior of the nation (Selasi 2009).

The World Health Organization (WHO) and The United Nations International Children Education Fund (UNICEF)

(2010), recommended exclusive breast milk for 6 months, breastfeeding in the first 6 hours after giving birth, nursing each time the baby will, and do not use bottle or teat. To reach the breast milk exclusively, WHO and UNICEF recommend a three step method of the first is feeding early after birth, the second is not a member of any extra food at the third baby, breast feeding as often and as much as it wants a baby . With the third expected goal of feeding by exclusive can be reached.

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The program is a program exclusive breast milk breast feeding promotion only on infants without giving other food or drink. The year 1990, the Government established the national movement Granting Increase breast milk (PPASI) that one aim is to cultivate the behavior of breastfeeding exclusively to infants from birth until the age of 4 months. According to the World Health Organization (2004), exclusive breast feeding is increased to 6 months as stated in the decision of the Minister of Health of the Republic of Indonesia by No. 450/MENKES/SK/VI/2004. The national movement of increased use of exclusive breast milk is one of the Government's efforts to achieve the Millennium Development Goals (MDGs).

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Basic Health Research results (2010), the pattern of feeding in infants aged 0 – 6 months grouped into 3 categories namely exclusive breastfeeding, predominant breastfeeding, breastfeeding and partial. The percentage of exclusive breastfeeding declined with increasing age group infants, Breast Milk Exclusively declined because of age infants 0-6 are given milk formula or feeding early, so that caused the number of exclusive breast milk decreased. In infants aged 5 months exclusive breastfeeding only 15.3%, 1.5% and predominant breastfeeding partial 83.2%.

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While in Papua province, the baby gets breast milk exclusively numbered (31.5%), where the exclusive distribution of ASI to the baby at 0 -6 month (54.3%), however the number of BREAST MILK exclusively in the province of Papua is still lower than the national figure. It is influenced by the lack of understanding of the people still even health workers about the benefits and importance of Exclusive breast feeding. On the other hand is still existence of promotion and marketing are so intensively related formulas that are sometimes difficult to control. Despite the efforts made by the Government of the province of Papua through the health services of exclusive breast feeding promotion gives way in order for the baby to be born got breast milk exclusively, increased knowledge of the officer about the benefits of breast milk exclusive facilities, provision of breastfeeding in the workplace, increase knowledge and skills, the improvement of family support and community as well as an attempt to control the spreading of formula milk. But the efforts exerted by the Government have not managed as expected. Breast feeding program has not yet reached the specified target 75% of babies should get breast milk exclusively but the reality facing does not comply with expectations, so that will affect growing flower child (health services Papua province in 2013).

Babies are experiencing growth and development which are the very basic things to be understood by parents or a midwife. Growing hibiscus children depending on the stimulation provided by the closest people such as parents, caregivers and other family members. The stimulation is an activity designed the basic capabilities of the child so that the child grow and develop optimally. Growing flowers is the manifestation of a complex of changes morphology, biochemistry, and physiology that occurred since its conception to maturity or adulthood. Baby flower growing period 0-6 months requires the intake of nutrition obtained through exclusive breast feeding (Soetjiningsih 2014).

Growth and optimal child development in the first year of life largely determine the quality of human resources in all of life, one of the factors that affect the growth and development is the breast milk as the sole nutrition for infants 0-6 Moon (Sintikhewati y. S, 2012).

The results of a preliminary survey conducted by researchers through interviews with a midwife at the Clinic Ridge on 23 January of 2015, States that the baby gets breast milk exclusively only 44 (4.23%) of 100 babies. This is caused by several factors, namely the social, cultural, psychological and physical factors.

Based on the above facts, research like this has not been done the region so that the researchers want to do research on "exclusive breast feeding Relationships with growing hibiscus in infants aged 0 – 6 months in Clinics Ridge District Biak Numfor Regency of Papua Province.

## 2. Method of Research

The design of the research used in this study was a *prospective cohort study*, is to examine the relationship between the risk factors with effects and aims to compare the relationship of exclusive breast feeding and non-exclusive breast milk with the growing hibiscus in infants' ages 4 – 6 months that meet the criteria of inclusion (Notoatmodjo, 2012).

The location of the research carried out in Biak Numfor Regency Ridge health centers. The implementation of this research was conducted in 25 April – 25 June 2015. With the recommendations of ethics Approval number: 0782/H 4.8.4.5.31/PP36-KOMETIK/2015.

The population in this research is all babies aged 4 – 6 months who got breast milk exclusively and non-exclusive breast milk in the workplace Clinics Ridge Biak Numfor Papua Province.

The sample is examined and considered objects that represent the overall population (Notoatmodjo, 2012), the sample in this research is the mother who has a baby 4-6 months of age to know Exclusive breast feeding, and compare the non-Exclusive breast milk on growing hibiscus. The number of babies 62 consists of 31 babies fed breast milk exclusively and 31 infants who were non Exclusive breast milk.

Sampling techniques is in the study using the technique of *purposive sampling*, namely the determination of the sample with a particular consideration. Determination of samples in the study wore a degree of confidence of 95%, as well as the level of error in decision making 5%. The sample of this research there were as many as 62 respondents with ASI Exclusive and non-Exclusive breast milk.

### 3. Result

#### 1) Univariate Analysis

##### a) Breast Feeding

Breast milk (breast milk) is an emulsion of fats in solution proteins, lactose and salts – *inorganic* salts are secreted by the pituitary gland, *mamma* mother and baby food as a useful research results based on the distribution of breast feeding can be seen in table 4.2 as follows:

**Table 4.1:** Frequency distribution of respondents based on breast feeding 4 – 6 months in infants in Clinics Ridge Biak Numfor Papua Province – the year 2015

No.	Breast Feeding	Frequency (n = 62)	Percentage (%)
1	An ASI	31	50.0
2	Non Exclusive breast milk	31	50.0
	Total	62	100

In table 4.1 can be seen that the respondents Exclusive breast milk as much as 31 baby (50.0%) and respondents the non-Exclusive breast milk as much as 31 baby (50.0%).

##### b) Characteristics of Respondents

**Table 4.2**

Distribution characteristics of respondents (age, education, and employment) who got breast milk exclusively and non-exclusive breast milk in infants aged 4-6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

The characteristics of the	ASI				Total	
	Exclusive		Non Exclusive		N	%
	n	%	n	%		
<b>Age Of Mother</b>						
< 20 years	1	3.2	1	3.2	2	3.2
20 – 35 years	29	93.5	26	83.9	55	88.7
> 35 years	1	3.2	4	12.9	5	8.1
<b>Total</b>	31	100	31	100	62	100
<b>Mother's Education</b>						
Elementary	1	3.2	3	9.7	4	6.5
Junior high school	1	3.2	2	6.5	3	4.8
High school	27	87.0	25	80.6	52	83.9
Graduate	2	6.5	1	3.2	3	4.8
<b>Total</b>	31	100	31	100	62	100
<b>The Job Of The Mother</b>						
Work	2	3.2	3	9.7	5	8.1
It Does Not Work	29	93.5	28	90.3	57	91.9
<b>Total</b>	31	100	31	100	62	100

Based on Table 4.2 can be seen that the age of 20 – 35 years more giving exclusive breast milk as much as 93.5%) 29 (while giving a non-breast feeding exclusive as much as (83.9%). On the educational of mothers shows that high school education more giving exclusive breast milk as much as 27 (87.2%). While a group of mothers who give non-exclusive breast milk as much as 25 (80.6%). While in the Group of mothers who are not working as many as 29 (93.5) gives breast milk exclusively on working mothers as much as 2 (6.5%).

**Table 4.3**

Distribution of exclusive breast feeding and non-exclusive breast milk according to the Age of respondents in Clinics Ridge Biak Numfor Propini Papua – the year 2015

The characteristics of the	ASI				Total	
	Exclusive		Non Exclusive		n	%
Baby Age	n	%	n	%		
4 months	16	51.6	10	32.3	26	41.9
5 months	10	32.3	9	29.0	19	30.6
6 months	5	16.1	12	38.7	17	27.4
<b>Total</b>	<b>31</b>	<b>100</b>	<b>31</b>	<b>100</b>	<b>62</b>	<b>100</b>

Based on Table 4.3 can be seen that babies fed breast milk exclusively available at the age of 4 months as many as 16 (51.6%) and the smallest on non-exclusive presentation at the age of 5 months as many as 10 babies (32.3%).

#### 2) Bivariate Analysis

##### a) Growth (*growth*)

The growth relates to the problem of changes in size, large, quantity, dimensions or levels of cells, organs, and individuals. Growth that can be assessed is the weight, length, head circumference and circumference of the upper arm. From table 4.4 can be seen as follows: The growth relates to the problem of changes in size, large, quantity, dimensions or levels of cells, organs, and individuals. Growth that can be assessed is the weight, length, head circumference and circumference of the upper arm. From table 4.4 can be seen as follows:

**Table 4.4**

**The value of average Growth in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015**

Measurement	Breast feeding	Weight	value	Body Length	Value	Head Circumference	Value	Upper arm circumference	value
		the mean ± SD		the mean ± SD		the mean ± SD		the mean ± SD	
P1	exclusive	7203.23 ± 855.76	0.000	66.59 ± 2.90	0.000	39.59 ± 2.39	0.000	at 14 ± 196	0.000
	non exclusive	6909.68 ± 2032.30		67.03 ± 4.40		37.90 ± was 3.20		13.06 ± 1.24	
P2	exclusive	7761.29 ± 834.94	0.000	67.74 ± 2.71	0.000	40.06 ± 2.36	0.000	14.35 ± 551	0.000
	non exclusive	7635.48 ± 1865.04		68.26 4.41 ±		38.97 ± 3.25		13.71 ± 1.24	
P3	exclusive	8361.55 ± 1712.71	0.000	68.84 ± 2.69	0.000	40.87 ± 2.17	0.000	15.06 ± 196	0.000
	non exclusive	8264.52 ± 1745.58		69.48 ± 4.11		39.77 ± 3.02		at 14 ± 1.36	

Table 4.4 indicates that the value of p for any measurements on body weight, length, head circumference and circumference of upper arm first, second and third p = (0.000). These results indicate that the average value on weight, length, head circumference and circumference of

upper arm in infants aged 4 – 6 months exclusive breast milk that are larger than the pad baby who is given non-exclusive breast milk.

**Table 4.5:** The value of average Growth in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

Measurement	Breast Feeding	Weight	Value	Body Length	Value	Head Circumference	value	Upper arm circumference	value
		the mean ± SD		the mean ± SD		the mean ± SD		the mean ± SD	
P1	exclusive	9458.06 ± 846.89	0.000	72.58 ± 3.34	0.000	43.07 ± 432	0.000	at 14 ± 545	0.000
	non exclusive	8906.45 ± 2379.91		72.19 ± 6.23		43.17 ± 1.03		13.52 ± 1.16	
P2	exclusive	10970.97909.65	0.000	74.37 ± 2.27	0.000	44.85 ± 641	0.000	14.285 ± 627	0.000
	non exclusive	9919.35 ± 2069.69		72.93 ± 5.93		44.02 ± 1.06		14:11 ± 1.19	
P3	Exclusive	10284.95 ± 1066.48	0.000	73.49 ± 3.29	0.000	43.94 ± 929	0.000	16.12 ± 552	0.000
	non exclusive	9823.66 ± 2333.48		73.02 5.96 ±		43.97 ± 1.29		14.87 ± 1.44	

Table 4.5 shows that the mean value of the weight, length, head circumference, and the circumference of the upper arm on the measurement of the first, second and third grades p = (0.000), these results show that the mean value in infants given breast milk exclusively better from a non-exclusive breast milk.

**b. The development**

The upgrade structure & function of the bodies that are more complex in regular patterns as well as can be foreseen as a result of the maturation process. The growth can be assessed motoric rough, fine motoric, social independent and speak and language. From table 4.5 can be seen as follows:

**Table 4.5:** The relationship between Exclusive breast feeding and Non Exclusive breast milk with the development in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

ASI	The development of the						The total number of		
	A rugged motor								
	Normal		Dubious		Deviation				
	n	%	n	%	n	%	n	%	
exclusive breast milk	30	56.6	1	16.7	0	0.0	31	50.0	0.010
non-exclusive breast milk	23	43.4	5	83.3	3	100	31	50.0	0.619
Total	53	100	6	100	3	100	62	100	

ASI	The development of the						The total number of		
	Fine Motor								
	Normal		Dubious		Deviation				
	n	%	n	%	n	%	n	%	
Exclusive breast milk	30	60.0	1	10.0	0	0.0	31	50.0	0.010
Non-exclusive breast milk	20	40.0	9	90.0	2	100	31	50.0	0.410
Total	50	100	10	100	2	100	62	100	

ASI	The development of the						The total number of		
	Social Independence								
	Normal		Dubious		Deviation				
	n	%	n	%	n	%	n	%	
Exclusive breast milk	29	63.0	1	8.3	1	25.0	31	50.0	0.000
Non Exclusive breast milk	17	37.0	11	91.7	3	75.0	31	50.0	0.429
Total	46	100	12	100	4	100	62	100	

In table 4.5 can be seen that the respondent's development as much as 62 infants (100%), the highest frequency on motoric rough 30 normal infants (56.6%) and the lowest frequency in the motoric rough i.e. deviations as much as 3 (100). For the highest frequencies is in the normal fine motoric 30 babies (60.0%) and the lowest frequency deviation of 2 infants (100).

For the highest frequency on normal social independence as much as 29 infants (63.0%) and the lowest frequency is an aberration as much as 1 baby (25.0%). While the highest frequency on the talk and normal language as much as 28 babies (63.6%) and the lowest frequency is an aberration as much as 3 babies (20.0%).

**Table 4.6:** Comparisons between Exclusive breast feeding and Non-exclusive with growing in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

ASI	The growth of the			
	Weight	The length of the body	Head Circumference	Upper arm circumference
Exclusive BREAST MILK Mean Rank	27.06	27.73	35.15	40.53
Non Exclusive BREAST MILK Mean Rank	35.94	35.27	27.85	22.57

Table 4.6 Shows that the results of the test statistic with *mann-whitney* showed the difference in value of weight between Exclusive breast milk with a value of mean rank 27.06 and Non-exclusive breast milk with a value of mean rank 35.94. This indicates the existence of a result of ASI exclusive better than non-breast milk exclusively, while the length of the value of the mean rank for 27.73 and non-exclusive breast milk exclusive 35.27, these results indicates that breast milk is better than the non-exclusive breast milk exclusively. While the head circumference means rank 35, 15 for the ASI value exclusive and non-exclusive to 27.85, this suggests that non-exclusive is higher than breast milk exclusively. The results of the head circumference indicate that breast milk exclusively the value of mean rank 40.53 and non-proprietary value rank 22.57 mean this indicates that the value is no better than the exclusive breast milk exclusively

**Table 4.7:** Comparisons between Exclusive breast feeding and Non-exclusive with Developments in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

Breast Feeding	The development of the			
	A Rugged Motor	Fine Motor	Social Independence	Speech & Language
exclusive breast milk mean rank	28.47	26.97	24.40	25.90
non-exclusive breast milk mean rank	34.53	36.03	37.60	37.10

The results of statistical tests by using the test of *mann-whitney* shows that the value of the significance of the p-value of 0.000 ( $< 0.05$ ) which means that there is a difference in value between Exclusive and non-exclusive breast milk against the rough value of motoric mean rank for ASI exclusive and non-exclusive 28.47 34.53. Fine Motoric mean value rank for ASI exclusive and non-Exclusive 26.97 39.03. Social independence value of mean rank for exclusive breast milk non-exclusive 24.40 37.60 and speak the language of the value of the mean rank for ASI exclusive and non-exclusive 25.90 37.10.

#### 4. Discussion

1) The relationship between Exclusive breast feeding and non-exclusive with developments in infants aged 4 – 6 months di Puskesmas Ridge Biak Numfor Regency of Papua Province – the year 2015.

##### a) A rugged Motor (*Gross motor*)

The results of statistical tests with test *spearman's rho* retrieved value  $p = 0.010$  and value  $r = -0.324$ . This shows there is a connection between the motor and the correlation being abusive towards exclusive and non-exclusive BREAST MILK in Clinics Ridge Biak Numfor Papua Province – the year 2015.

This indicates that the frequency distribution based on the development of as many as 100 (62%) who got exclusive breast milk as much as 31 (50%) and the non-exclusive breast milk as much as 31 baby (50%) in Biak Numfor Regency Ridge Clinics Papua 2015. Development of the can in value through motoric rough, fine motoric, social independence and speak the language.

This indicates that most respondents are normal as much rough motoric (85.5%) while a small percentage of respondents who were rough as much as motoric (4.8%). This could happen because the majority of infants who do not get exclusive breast milk so that caused some respondents who experienced a motoric rough going on diversion on the baby. This is due to the many parents who don't give breast milk since the baby is born and the baby has not reached the age of 6 months has been given extra food.

Based on the research that has been done by (Ulfra Farrah Lisa 2012), it can be concluded that the majority of infants (83.1%) were not given breast milk exclusively, whereas the given exclusive breast milk as much as (16.9%). On the level of development of motoric rough baby found 88 infants developing appropriate age and 143 babies doesn't develop appropriate age.

Based on the theory of a rugged Motor the baby is part of motor activity that includes the skills of large muscles, such as crawling, prone, lifting the neck and sat down. Therefore the given breast milk alone until the babies age 6 months because breast milk is not only a nation's future investments, because of the giving breast milk need to be protected, promoted and supported. Thus that between theory and reality that is retrieved can be in sync and there is the

relationship between exclusive breast feeding with the development of motoric rough on babies.

#### **b) Fine motor (*fine Motor*)**

The results of statistical tests with test *spearman's rho* retrieved value  $p=0.001$  and the value of  $r = -0.410$ . These shows there are a connection and the correlation being between fine motor against ASI exclusive and non-exclusive Clinics Ridge Biak Numfor Papua Province – the year 2015.

This indicates that the frequency distribution based on the development of as many as 100 (62%) who got exclusive breast milk as much as 31 (50%) and the non-exclusive breast milk as much as 31 baby (50%) in Biak Numfor Regency Ridge Clinics Papua 2015. Development of the can in value through motoric rough, fine motoric, social independence and speak the language. This indicates that most respondents are fine motoric (80.6%) as much as normal while a small percentage of respondents that smooth as much as motoric (4.8%). This could happen because the majority of infants who do not get exclusive breast milk so that caused some respondents who experienced fine motoric occur irregularities in infants. This is due to the many parents who don't give breast milk since the baby is born and the baby has not reached the age of 6 months has been given extra food.

Based on research (Pipiet Riani, 2014), conducted through the test statistic value arises ( $p = 0,016$ ) shows that there is a relation of exclusive breast feeding fine motoric development in infants. While according to the theory that fine motor skill activity is to involve the movement of muscles – muscles are small, such as drawing, writing, beads, embroidery, eat etc.

#### **c) Social Independence**

The results of statistical tests with test *spearman's rho* retrieved value  $p=0.000$  and  $r = -0.429$ . These shows there are a connection and the correlation being between social independence against ASI exclusive and non-exclusive Clinics Ridge Biak Numfor Papua Province – the year 2015.

This indicates that the frequency distribution based on the development of as many as 100 (62%) who got exclusive breast milk as much as 31 (50%) and the non-exclusive breast milk as much as 31 baby (50%) in Biak Numfor Regency Ridge Clinics Papua 2015. Development of the can in value through motoric rough, fine motoric, social independence and speak the language.

This indicates that most respondents are social independence as much as normal (74.2%) while a small percentage of respondents who experienced standalone social deviations as much as (6.5%). This could happen because the majority of infants who do not get exclusive breast milk so that caused some respondents who experienced social independence happening deviations in infants. This is due to the many parents who don't give breast milk since the baby is born and the baby has not reached the age of 6 months has been given extra food.

Based on research (pipiet Riani, 2014), conducted through the test statistic value arises ( $p = 0,016$ ) shows that there is a relationship of breast feeding exclusively on the development of social independence in infants.

According to the theory that the development of personal social beginning in the early life of the baby, the child's ability to interact and socialize with their surroundings. Personal development includes a variety of skills that are classified as habits, personality, character, and emotions

#### **d) The ability to talk and language**

The results of statistical tests with test *spearman's rho* retrieved value  $p=0.000$  and  $r = -0.433$ . This shows there are a connection and the correlation being between social independence against ASI exclusive and non-exclusive Clinics Ridge Biak Numfor Papua Province – the year 2015.

This indicates that the frequency distribution based on the development of as many as 100 (62%) who got exclusive breast milk as much as 31 (50%) and the non-exclusive breast milk as much as 31 baby (50%) in Biak Numfor Regency Ridge Clinics Papua 2015. Development of the can in value through motoric rough, fine motoric, social independence and speak the language.

This indicates that most respondents are talking and normal language as much as (71.0%) while a small proportion of respondents who experienced a standalone social deviation as much as (4.8%). This could happen because the majority of infants who do not get exclusive breast milk so that caused some respondents who experienced the talk and language going on diversion on the baby. This is due to the many parents who don't give breast milk since the baby is born and the baby has not reached the age of 6 months has been given extra food.

Based on research (Pipiet Riani, 2014), conducted through the test statistic value arises ( $p = 0,016$ ) shows that there is a connection to the development of exclusive breast feeding talk and language in infants.

Based on the theory that talk is a form of language that his own articulation or the word – the word used to convey the meaning. Or talk is external (output oral) or of a verbal language, or activities to communicate through verbal expression.

Language proficiency is the indicator of the whole development of the child, because language proficiency is sensitive to delays or abnormalities in the system, such as cognitive ability, sensorimotor, psychology, emotions and the surrounding environment.

2) Comparisons between Exclusive breast feeding and Non-exclusive with growing in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

The results of statistical tests by using the test of *mann-whitney* shows that the value of the significance of the  $p$ -value of 0.000 ( $< 0.05$ ) which means that there is a

difference in value between Exclusive and non-exclusive breast milk.

This shows that respondents who got Exclusive breast milk most have normal body weight growth of as much as 26 babies (83.9). While respondents who got exclusive breast milk fraction experiencing weight skinny 2 infants (6.5). For the weight of respondents the non-exclusive mostly skinny weight as much as 12 babies (38.7) while respondents' fraction skinny weight once as many as 4 babies (12.9).

Most of the respondents who got exclusive breast milk with normal body length as much as 23 babies (74.2) and a small percentage of the respondents who are non-exclusive with short length as much as 3 babies (9.7). While the respondents are non-exclusive most normal body length as much as 14 baby (45.2) and respondents a fraction long skinny bodies all 4 baby (12.9).

For respondents who got exclusive breast milk is largely normal head circumference 26 babies (83.9) and a small proportion of respondents head circumference macrocephaly as much as 3 babies (9.7). While the respondents are non-exclusive mostly normal weight by as much as 22 babies (71.0) and a small proportion of respondents with a circumference of head microcephaly as much as 1 (3.2).

For upper arm circumference respondents who got exclusive breast milk most of the head circumference of good nutrition as much as 30 (96.8) and a small proportion of respondents with a head circumference of nutrition less as much as 1 baby (3.2), whereas a non-exclusive rponden most upper arm circumference of nutrition less as many as 17 infants (54.8) and a small proportion of respondents with an upper arm circumference of malnutrition by as much as 2 (6.5).

3) Comparisons between Exclusive breast feeding and Non-exclusive with Developments in infants Aged 4 – 6 months in Clinics Ridge Biak Numfor Papua Province – the year 2015

The results of statistical tests by using the test of *mann-whitney* shows that the value of the significance of the p-value of 0.000 (< 0.05) which means that there is a difference in value between Exclusive and non-exclusive breast milk against rough, fine motoric, social independence and speak the language.

This shows that respondents who got Exclusive breast milk most have normal rough motoric development as much as 30 infants (96.8). While respondents who got exclusive breast milk fraction doubted as much as 1 baby (3.2). For rough motoric non-exclusive are respondents mostly normal babies as much as 23 (74.2) while respondents fraction experiencing irregularities as much as 3 babies (9.7).

Most of the respondents who got BREAST MILK exclusively with fine motoric normal 30 babies (96.8) and a small proportion of respondents who is conducting deviations as much as 1 baby (3.2), whereas for non-exclusive with fine motoric normal babies (as much as 20 64.5) and fine motoric small percentage of respondents suffered an aberration as much as 2 infants (6.5).

For respondents who got exclusive breast milk most normal social independence was as much as 29 infants (93.5) and a small proportion of respondents doubting the independence social as much as 1 baby (3.2). While the respondents are non-exclusive largely independent of normal social as much as 17 infants (54.8) and a small proportion of respondents with social self-reliance suffered lapses by as much as 3 (9.7)

For the respondents speak and language who got exclusive breast milk is largely normal as many as 28 (90.3) and a small proportion of respondents with a talk and doubted as much as 3 babies (9.7), whereas a non-exclusive respondent largely normal as many as 16 Baby (51.6) and a small proportion of respondents with a talk and language experience deviations as much as 3 (9.7).

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