

## EXTENDED ABSTRACT

# Exclusive Breastfeeding for Preventing the Occurrence of Wasting among Under-Five Children in Guntung Payung, Banjarbaru

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### SUMMARY

Wasting is a growth failure based on weight for height z-score due to chronic lack of nutrition. The purpose of this study was to analyze the relationship between parity, family size, exclusive breastfeeding and complete basic immunization, and the prevalence of wasting among under-five children in Guntung Payung Community Health Center Banjarbaru. A case control design was conducted on 60 respondents (30 controls and 30 wasting). These variables were analyzed by Chi-square test. The results showed that mothers who do not provide exclusive breastfeeding ( $p < 0.036$ ) are 3.6 times more likely to have wasted children.

**Keywords:** Exclusive breastfeeding, Under-five children, Wasting

### INTRODUCTION

Wasting is a chronic malnutrition of under-five children which is characterized by failure of optimal growth as measured by weight for height z-score (WHZ). Around 13.5% of Indonesian under-five children experience wasting, which ranks 12th highest in the world (1). The prevalence of wasting in Banjarbaru City is 9%. In the area of Guntung Payung Health Center, Landasan Ulin District, the prevalence is 10.3%. So, it can be considered a serious problem. Wasting can decrease intellectual performance, negatively affect work capacity, and increase mortality in children (2,3). Parity, number of families, history of exclusive breastfeeding and complete basic immunization are factors associated with wasting among under-five children (4). This study aims to investigate these factors related to wasting among under-five children in the area of Guntung Payung Public Health Center, Banjarbaru City.

### MATERIALS AND METHODS

A case-control study was conducted involving 60 under-five children (aged 12-59 months): 30 controls and 30 wasting. Wasting children were categorized based on WHZ -3 to  $< -2$  SD. Parity data, family size, exclusive breastfeeding and complete basic immunization

were collected using the questionnaire. Exclusive breastfeeding was determined by choosing the history of exclusive breastfeeding, then verified by the type of food given for the age of under 6 months. The 2x2 chi-square test was used to analyze these variables.

### RESULTS AND DISCUSSION

Table I shows that there is a significant relationship between the history of exclusive breastfeeding and wasting among under-five children ( $p = 0.036$ , OR: 3.596), meaning that mothers who do not provide exclusive breastfeeding have a 3.6 times risk of having a wasted children. Exclusive breastfeeding is one of the indicators of success in fulfilling the nutrition of under-five children, affecting their growth and development (5). The high number of mothers of under-five children who are involved in economic activities as active workers in various sectors might reduce the fulfillment of exclusive breastfeeding for under-five children, so that the risk of malnutrition is higher. Exclusive breastfeeding plays an important role in the prevention of malnutrition in childhood, including wasting, stunting, overweight, underweight, and micronutrient deficiencies. The risk of infectious diseases can also be minimized by exclusive breastfeeding. On the other hand, we cannot prove the relationship between parity, family size, complete basic

**Table 1: Correlation of parity, family size, exclusive breastfeeding, complete basic immunization on wasting under five children.**

	Category	Case	Control	n (60)	p value
Parity	1	10(33.3%)	6(20%)	16	0.381
	>1	20(66.7%)	24(80%)	44	
Family size	>4	19(63.3%)	14(46.7%)	27	0.299
	1-4	11(36.7%)	16(53.3%)	33	
Complete basic immunization	Incomplete	3(10%)	4(13.3%)	7	1.000
	Complete	27(90%)	26(86.7%)	53	
Exclusive breastfeeding	No	22(73.3%)	13(43.3%)	35	0.036 <sup>†</sup>
	Yes	8(26.7%)	17(56.7%)	25	

<sup>†</sup>Significant at p<0.05, 95%CI: 3.596 (1.216-10.638)

immunization and wasted children.

### CONCLUSION

Our study suggests that mothers who do not provide exclusive breastfeeding are 3.6 times more likely to have wasted children. On the other hand, parity status, family size, and complete basic immunization have no relationship with wasted children. It seems that breastfeeding prevents the occurrence of wasted among under-five children.

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