

## Factors to accelerate the reducing stunting cases in Jombang regency, with optimal convergence actions and cross sectoral effort



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### ABSTRACT

**Introduction:** The current burden of malnutrition in Indonesia is trifold. The nutrition programme component aims to reduce the triple burden of malnutrition throughout the life cycle, through support to maternal nutrition, prevention of stunting and wasting in children under 5 years of age, nutrition for school-age children and adolescents, and overweight prevention. The purpose of this study was to determine the factors to accelerate the reducing stunting cases in Jombang regency, with optimal convergence actions and cross sectoral effort.

**Methods:** This study is a qualitative study with a case study approach. The study is located in 11 village in Jombang regency. This study was conducted in September–November 2021. Data collection was carried out in 11 village in Jombang district East Java Province, Curah Malang Village, Murukan Village, Diwek Village, Rejoslamet Village, Dukuh Kloplo, Pakel, Kali Kejambon, Jombatan, Sumber Mulyo, Gadingmangu, Darurejo.

**Results:** The percentage of stunting in 2018 to 2021 has decreased significantly. According to data from the Bappeda of Jombang Regency on November 29, 2021, the stunting performance review activity showed that, in 2018 the number of cases in Jombang Regency was 20.1% with the number of stunting toddlers being 15,056 children, experiencing a decrease of 9.8% in 2021. The percentage of case data in 2021 is 10.3% with a total of 7,518 stunting children under five.

**Conclusion:** The percentage of stunting in 2018 to 2021 has decreased significantly which is influenced by various factors that need to be controlled to reduce the incidence of stunting in Jombang regency.

**Keywords:** stunting, Jombang regency, optimal convergence action.

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### INTRODUCTION

Malnutrition is currently having a triple impact in Indonesia. More than 7 million children under five suffer from stunting, which accounts for 31% of all cases of undernutrition in children, while another 2 million are severely wasted. Nearly half of pregnant mothers are anaemic (49 per cent) and 17 per cent suffer from chronic energy deficiency. Meanwhile, 1.9 million (8 per cent) children are overweight. Suboptimal quantity, quality and diversity of diets, coupled with high rates of infectious diseases, due predominantly to unhealthy environments with poor water, sanitation and hygiene conditions and low access to health services, lead to poor maternal and child nutrition.<sup>1,2</sup> Indonesia showcases a prime example of the double burden of malnutrition,

with stagnant levels of under-nutrition and rapidly increasing over-nutrition. Malnutrition is currently having a triple impact in Indonesia. More than 7 million children under five suffer from stunting, which accounts for 31% of all cases of undernutrition in children, while another 2 million are severely wasted.<sup>3</sup>

Based on RISKESDAS 2018, approximately more than one fourth (26.9 per cent) of adolescents aged 16–18 years are stunted, 8.1 per cent are wasted, and 13.5 per cent are overweight. While the stunting prevalence among adolescents has slightly reduced compared to RISKESDAS 2013 data, the overweight is increasing in an alarming rate. The rate of overweight and obesity among the younger adolescents aged 13–15 years reached 16 percent.<sup>4</sup> The nutrition programme component aims to reduce the

triple burden of malnutrition throughout the life cycle, through support to maternal nutrition, prevention of stunting and wasting in children under 5 years of age, nutrition for school-age children and adolescents, and overweight prevention. East Java has an estimated of 680,082 wasting children in which around 193,102 were estimated severely wasted. The programme targets these children by bringing integrated management of acute malnutrition into existing health sector plans, budgets, policies and programmes, with optimum inclusion of essential commodities into national supply chain systems and enabling regular detection of child wasting through active case finding by community.<sup>5</sup>

In Indonesia, poor maternal weight gain and nutrient deficiencies during pregnancy contribute to 6% of births

that are low birth weight. Counselling for pregnant women is delivered through ANC services which provide an opportunity for pregnant women to receive counselling on healthy diets and appropriate weight gain but 23% do not attend the recommended ANC care at least four times during pregnancy. Maternal nutrition has received limited attention to date. Developing the capacity of multiple sectors to focus their policies, plans and actions on improving maternal nutrition is crucial.<sup>1,2,6</sup>

The purpose of this study was to determine the factors to accelerate the reducing stunting cases in Jombang regency, with optimal convergence actions and cross sectoral effort.

## METHODS

### Study Design

This study is a qualitative study with a case study approach. The study is located in 11 village in Jombang regency. This study was conducted in September-November 2021.

### Data Collection

Data collection was carried out in 11 village in Jombang district East Java Province, Curah Malang Village, Murukan Village, Diwek Village, Rejoslamet Village, Dukuh Klopo, Pakel, Kali Kejambon, Jombatan, Sumber Mulyo, Gadingmangu, Darurejo.

### Data Analysis

Data analysis was carried out using the SPSS version 22 computer program to determine the frequency distribution of each variable according to the year collected.

## RESULTS

The percentage of stunting in 2018 to 2021 has decreased significantly. According to data from the Bappeda of Jombang Regency on November 29, 2021, the stunting performance review activity showed that, in 2018 the number of cases in Jombang Regency was 20.1% with the number of stunting toddlers being 15,056 children, experiencing a decrease of 9.8% in 2021. The percentage of case data in 2021 is 10.3% with a total of 7,518 stunting children under five.<sup>7</sup>

There are 11 stunting loci villages in Jombang Regency, namely Curahmalang Village, Murukan Village, Diwek Village, Rejoslamet Village, Dukuh Klopo Village, Pakel Village, Kalikejambon Village, Jombatan Village, Sumbermulyo Village, Gadingmangu Village and Darurejo Village. The following is the percentage of case data in 11 stunting loci villages in Jombang Regency.

According to Bappeda, Jombang Regency said that, in the global-national goal, it has a target by 2030 which is to end all forms of malnutrition, including stunting in under-fives and toddlers. The target in the RPJMN (National Medium-Term Development Plan) in 2024 is the national stunting rate is targeted to decrease to 14% of cases. Therefore, it is necessary to have a sectoral role in nutrition intervention as well as a good budget allocation in handling stunting cases.<sup>7</sup>

Representatives of Bina Bangda, Ministry of Home Affairs, presented data on the number of cases and the achievement of targets that have been implemented in the Jombang Regency area with presentation coverage of 20 Main Intervention Indicators for Stunting Prevention.

## DISCUSSION

According to Bappeda, Jombang Regency said that, in the global-national goal, it has a target by 2030 which is to end all forms of malnutrition, including stunting in under-fives and toddlers. The target in the RPJMN (National Medium-Term Development Plan) in 2024 is the national stunting rate is targeted to decrease to 14% of cases. Therefore, it is necessary to have a sectoral role in nutrition intervention as well as a good budget allocation in handling stunting cases.<sup>7</sup>

Representatives of Bina Bangda, Ministry of Home Affairs, presented data on the number of cases and the achievement of targets that have been implemented in the Jombang Regency area with presentation coverage of 20 Main Intervention Indicators for Stunting Prevention. According to RISKESDAS 2018, nearly a quarter (26.7%) of adolescents between the ages of 16 and 18 are stunted, 8.1% are wasting, and 13.5%

**Table 1.** The percentage of case data in 11 stunting loci villages in Jombang Regency.

	Bad Luck	Murukan	Diwek	Rejoslamet	Hamlet Klopo	Package	Kalikejambon	Bridge	Source Mulyo	Gadingmangu	Darurejo
2020	28.5%	41.2%	38.7%	31.44%	28.97%	29.12%	27.25%	26.62%	26.45%	25.52%	24.92%
2021	11.62%	7.39%	9.91%	8.69%	4.86%	17.36%	18.77%	10.02%	19.01%	14.48%	13.90%

(Data source Bappeda Jombang Regency, 2021)

are overweight.

When compared to RISKESDAS 2013 statistics, the prevalence of stunting among adolescents has somewhat decreased, while the rate of overweight children is rising alarmingly. Among younger teenagers (aged 13 to 15), the rate of overweight and obesity reached 16 percent. With support for maternity nutrition, stunting and wasting prevention in children under 5, nutrition for school-age children and adolescents, and obesity prevention, the nutrition program component strives to lessen the triple burden of malnutrition across the life cycle. Around 193,102 of the estimated 680,082 wasted youngsters in East Java were considered to be severely wasted.<sup>4</sup>

One of the main factors influencing child malnutrition, especially stunting, has been identified as appropriate baby and young child feeding. In the present study, children who had inappropriately exclusive breastfeeding had a higher likelihood of being stunted than their peers. This conclusion is supported by research done in the rural Dubit area, Arba Minch, and Nepal.<sup>8-10</sup> This could be an early start, as nursing exclusively for the first six months of life covers the majority of infants' demands for energy and nutrients while also protecting them from gastrointestinal illnesses, which can cause severe nutrient depletion and stunting. Additionally, breastfeeding is insufficient to supply a baby's nutritional needs after six months. The child is more vulnerable to higher hazards of growth retardation with both an earlier and a later introduction of supplemental meals.<sup>11</sup>

## CONCLUSIONS

The percentage of stunting in 2018 to 2021 has decreased significantly which

is influenced by various factors that need to be controlled to reduce the incidence of stunting in Jombang regency. herefore, further research is needed with a different study design and a larger sample size to find out more about the factors to accelerate the reducing stunting cases in Jombang regency, with optimal convergence actions and cross sectoral effort.

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## AUTHOR CONTRIBUTION

All authors contributed to this study's conception and design, data analysis and interpretation, article drafting, critical revision of the article, final approval of the article, and data collection.

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## CONFLICT OF INTEREST

There is no conflict of interest for this manuscript.

## ETHICAL CONSIDERATION

This study has been declared ethical by the Ethical Commission for Health Research of Universitas Nahdlatul Ulama Surabaya.

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