

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Determination of appropriate policy targets to reduce the prevalence of stunting in children under five years of age in urban-poor communities in Indonesia: A secondary data analysis of the 2022 Indonesian National Nutritional Status Survey
AUTHORS	Laksono, Agung; Izza, Nailul; Trisnani, Trisnani; Paramita, Astridya; Sholikhah, Hidayad; Andarwati, Pramita; Rosyadi, Khoirul; Wulandari, Ratna Dwi

VERSION 1 - REVIEW

REVIEWER NAME	Das, Sushmita
REVIEWER AFFILIATION	Society for Nutrition, Education and Health Action
REVIEWER CONFLICT OF INTEREST	None
DATE REVIEW RETURNED	25-Jun-2024

GENERAL COMMENTS	<p>Since there are numerous studies on stunting and its determinants, the authors should explain in the 'Introduction' why this study is important and how it will contribute to the existing body of knowledge.</p> <p>All information regarding the National Nutritional Status Survey, including settings, sample, data collection, and anthropometry procedures, should be included in the 'Data sources' section.</p> <p>Table 1 should include the numbers for each of the variables and options. I suggest rechecking the p-values of all the variables; for instance, maternal marital status may not be significantly associated with stunting. If available, birth order and birth interval can also be included as determinants of stunting. Wealth status can be divided into quintiles or quartiles. In Table 2, it would be beneficial to include the unadjusted Odds Ratio as well.</p> <p>The language of the article needs substantial improvement.</p>
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REVIEWER NAME	Amaha, Nebyu
REVIEWER AFFILIATION	Mekelle University
REVIEWER CONFLICT OF INTEREST	None
DATE REVIEW RETURNED	26-Jun-2024

GENERAL COMMENTS	<p>1) Policy is the main part of your title "Determining Appropriate Policy Targets to Reduce the Prevalence of Stunted Toddlers in Urban-Poor Communities in Indonesia", however, no information on the Indonesian national strategies to combat stunting were mentioned in either the introduction or discussion. The authors need to give more background to the policies of the government and what has been done so far, what policies were deemed successful and</p>
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	<p>what policies were not successful. For e.g. include information regarding the 2018-2024 National Strategy to Accelerate Stunting Prevention</p> <p>2) Page 2, Strengths and Limitations, line 16 "Agri-food output during pregnancy", what is this?</p> <p>3) Page 2, Abstract, line 35, the authors mention there were 9 independent variables and listed 8 variables</p> <p>4) It's not clear how or why the authors chose these 8 independent variables</p> <p>5) More background information regarding the national nutrition survey is necessary, Why was it conducted, types of information conducted, is this the first time it was conducted, what were the previous results, what changed from these results?</p> <p>6) In the Introduction section last paragraph, the authors mention the environmental problems of urban dwellers. However, household and environmental factors associated with nutrition were not included in the analysis, for e.g. sanitation, handwashing, access to clean water.</p> <p>7) Page 4, Setting, line 37, "We conducted?" Is this a secondary data analysis or a primary study?</p> <p>8) Page 5, Independent Variables, mother's <19 is not clear and neither is >45, what are the lower and upper limit for these ages?</p> <p>9) Page 5, Independent Variables, line 17, why was the 0-11 months chosen as the first category for child age instead of the common <6, 6-11 months</p> <p>10) "The following five objectives are intended to be achieved by the National Strategy for Accelerating Decline Stunting, as specified in Regulation of the President of the Republic of Indonesia Number 72 of 2021" Then you went on to list four recommendations? State the national strategy in the introduction, differentiate between objectives and recommendations.</p> <p>11) Discussion page 8, line 13 "A systematic review study also indicated a decreased risk of stunting as the maternal age increases to". Incomplete sentence!</p> <p>12) The study needs to align with the title with the rest of the manuscript</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Sushmita Das, Society for Nutrition, Education and Health Action

Comments to the Author:

Since there are numerous studies on stunting and its determinants, the authors should explain in the 'Introduction' why this study is important and how it will contribute to the existing body of knowledge.

Response: Poverty is a problem for around 7% of Indonesia's urban population.¹⁴ In heavily populated metropolitan regions, even the most essential urban life, such as living near open gutters and water puddles, is constantly exposed to harmful trash. Poor sanitation can lead to the spread of intestinal parasites, such as worms. People living in poverty in metropolitan areas often struggle to afford nutrient-dense meals because of their limited budgets and the high cost of food. Contaminated settings and food usually prepared in an unclean way might cause stunting.¹⁵ Disease and nutritional status problems harm the limited resources, means of subsistence, and savings of low-income urban residents.¹⁴

Urban problems in low-income nations stem from two interconnected systems: the environmental system, which includes things like water, land, and air pollution as well as waste management, water scarcity, and settlements, and the social system, which includes things like unemployment, inadequate sanitation, and health services. The healthcare needs of low-income urban communities are often unfulfilled because these communities have a more challenging time gaining access to public services.¹⁶ According to a previous survey, residents of urban slum areas said that at least one family member had been sick in the last two weeks. Other research has found that older people, toddlers, small children, and individuals with compromised immune systems are the most susceptible groups in urban informal settlements.¹⁷ Based on the background context, the study aims to determine the appropriate policy targets to reduce the prevalence of stunted toddlers in urban-poor communities in Indonesia.

All information regarding the National Nutritional Status Survey, including settings, sample, data collection, and anthropometry procedures, should be included in the 'Data sources' section.

Response: The study used secondary data from the 2022 Indonesian Nutrition Status Survey, which the Indonesian Ministry of Health analyzed nationwide. Previously, the Indonesian Ministry of Health had conducted a similar survey in 2019 and 2021. The 2022 Indonesian Nutrition Status Survey provides an overview of the nutritional status of children under five (stunting, wasting, underweight, overweight) and its determinants including specific nutritional intervention indicators and sensitive nutritional interventions using a cross-sectional two-stage stratified sampling method. The total sample was 334,848 babies and toddlers. Data collection in 486 regencies/cities in 33 provinces in Indonesia.

Data were collected through anthropometric measurements (body weight, length/height of toddlers, upper arm circumference of young women, women of childbearing age, and pregnant women). Data collection uses standardized tools and interviews. At the end of implementation, the survey recorded a response rate of 91.4%.

Table 1 should include the numbers for each of the variables and options. I suggest rechecking the p-values of all the variables; for instance, maternal marital status may not be significantly associated with stunting. If available, birth order and birth interval can also be included as determinants of stunting. Wealth status can be divided into quintiles or quartiles. In Table 2, it would be beneficial to include the unadjusted Odds Ratio as well.

The language of the article needs substantial improvement.

Response: the p-value has been checked, and the results are shown in Table 1.

Birth order and birth interval are not available in the 2022 Indonesian Nutrition Status Survey.

We referred to the wealth categories provided by the 2022 Indonesian Nutrition Status Survey data set (in quintiles).

Reviewer: 2

Dr. Nebyu Amaha, Mekelle University

Comments to the Author:

1) Policy is the main part of your title "Determining Appropriate Policy Targets to Reduce the Prevalence of Stunted Toddlers in Urban-Poor Communities in Indonesia", however, no information on the Indonesian national strategies to combat stunting were mentioned in either the introduction or discussion. The authors need to give more background to the policies of the government and what has been done so far, what policies were deemed successful and what policies were not successful. For e.g. include information regarding the 2018-2024 National Strategy to Accelerate Stunting Prevention

Response: The information was added to the introduction.

The Indonesian government previously released the National Strategy for Accelerating Stunting Prevention 2018-2024. This national strategy aims to ensure that all resources are directed and allocated to support and finance priority activities, significantly increasing the coverage and quality of nutrition services for households in the first 1,000 days of life (pregnant women and children aged 0-2 years). The strategy document includes preventing stunting with specific and sensitive nutritional interventions.⁵

With a prevalence of 24.4% in 2021 and 21.6% in 2022, Indonesia is one of the SEA Region member nations with a relatively high stunting rate.⁶ A closer inspection of these numbers reveals that stunting has dropped by about 3.3% in Indonesia in just one year. Nevertheless, the performance falls short of the national target established by the Indonesian government to reduce stunting to 14% by 2024; therefore, this does not augur well for the nation.⁷ In reality, the prevalence of stunting only decreased by 0.1% and became 21.5% in 2023. The government argues that the COVID-19 pandemic is the cause of slow efforts to prevent stunting.⁸

2) Page 2, Strengths and Limitations, line 16 "Agri-food output during pregnancy", what is this?

Response: the author has removed the term.

3) Page 2, Abstract, line 35, the authors mention there were 9 independent variables and listed 8 variables

Response: the author has corrected in the abstract.

4) It's not clear how or why the authors chose these 8 independent variables

Response: based on the previous studies and availability of variables from the analyzed survey.

5) More background information regarding the national nutrition survey is necessary,

Why was it conducted, types of information conducted, is this the first time it was conducted, what were the previous results, what changed from these results?

Response: The author added this information in the methods section.

6) In the Introduction section last paragraph, the authors mention the environmental problems of urban dwellers. However, household and environmental factors associated with nutrition were not included in the analysis, for e.g. sanitation, handwashing, access to clean water.

Response: This narrative is to strengthen the argument for why this study was conducted in a population of urban-poor communities.

7) Page 4, Setting, line 37, "We conducted?" Is this a secondary data analysis or a primary study?

Response: The term changed to "We examined a nationwide study among urban poor societies in Indonesia."

8) Page 5, Independent Variables, mother's <19 is not clear and neither is >45, what are the lower and upper limit for these ages?

Response: The division into categories refers to several previous studies. Mothers ≤ 19 are all mothers of toddlers aged 19 and under. Mothers ≥ 45 are all mothers of toddlers aged 45 and over.

9) Page 5, Independent Variables, line 17, why was the 0-11 months chosen as the first category for child age instead of the common <6, 6-11 months

Response: We created categories with the same age range.

10) "The following five objectives are intended to be achieved by the National Strategy for Accelerating Decline Stunting, as specified in Regulation of the President of the Republic of Indonesia Number 72 of 2021" Then you went on to list four recommendations? State the national strategy in the introduction, differentiate between objectives and recommendations.

Response: the narration was corrected.

The following five objectives are intended to be achieved by the National Strategy for Accelerating Decline Stunting, as specified in Regulation of the President of the Republic of Indonesia Number 72 of 2021: The first, recommendation is to increase food and nutritional security at the family, individual, and community levels; second, to improve behavior change communication and community empowerment; third, to increase the convergence of specific interventions and sensitive interventions in ministries/agencies, provincial, regional governments, regional governments, district/city, and

village governments; fourth, rising food and nutritional security at the family, individual and community levels; and lastly to strengthen leadership commitment and vision in these entities.6

11) Discussion page 8, line 13 "A systematic review study also indicated a decreased risk of stunting as the maternal age increases to". Incomplete sentence!

Response: the sentence was revised as suggested.

12) The study needs to align with the title with the rest of the manuscript

Response: the title was revised as suggested.

VERSION 2 – REVIEW

REVIEWER NAME	Amaha, Nebyu
REVIEWER AFFILIATION	Mekelle University
REVIEWER CONFLICT OF INTEREST	None
DATE REVIEW RETURNED	30-Jul-2024

GENERAL COMMENTS	1) The title needs revision, please include the following changes: mention the source of the data, mention it is secondary analysis, specify the age as under 5 years old children, and include the year of the survey. 2) The word toddler is usually reserved for children between the ages of 1 to 3 years, however, this study includes children from the age range of 0 to 59 months. 3) Please improve the overall English language of the manuscript
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 2

Dr. Nebyu Amaha, Mekelle University

Comments to the Author:

1) The title needs revision, please include the following changes: mention the source of the data, mention it is secondary analysis, specify the age as under 5 years old children, and include the year of the survey.

Response: The title was revised as suggested.

2) The word toddler is usually reserved for children between the ages of 1 to 3 years, however, this study includes children from the age range of 0 to 59 months.

Response: The term was revised to under five.

3) Please improve the overall English language of the manuscript

Response: The manuscript has gone through the proofreading service again.

Reviewer: 2

Competing interests of Reviewer: None