

# INFLUENCE OF COLLABORATIVE GOVERNANCE DYNAMICS ON STUNTING PREVENTION AFTER THE COVID-19 PANDEMIC IN THE EAST NUSA TENGGARA, INDONESIA

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**Abstract.** The Indonesian government has planned to improve human resources with one of the indicators being a decrease in the prevalence of stunting. However, during the implementation of policies related to COVID-19, stunting prevention in Indonesia experienced various challenges from several sectors. Based on the results of the Indonesian nutrition study in 2021, the stunting rate in Indonesia was still 24.4%, with East Nusa Tenggara Province as the highest prevalence area, at 37.8%. There are two stunting prevention interventions that have been implemented in Indonesia, namely specific and sensitive interventions. Collaborative governance is needed in implementing both interventions. This study aimed to describe the role of collaborative governance in handling stunting in East Nusa Tenggara Province. This qualitative research used an in-depth interview method and informant triangulation with government and non-government agencies in East Nusa Tenggara Province, namely (1) Regional Research and Development Planning Agency of East Nusa Tenggara Province, (2) Family Planning Agency, Youth and Toddler Family Development, National Population and Family Planning Board of East Nusa Tenggara Province, (3) Office of Women's Empowerment and Child Protection of East Nusa Tenggara Province, (4) Office of Agriculture and Food Security of East Nusa Tenggara Province, (5) Family Welfare Empowerment of East Nusa Tenggara Province, (6) Oesapa Community Health Center, (7) Health and Civil Registration Office of East Nusa Tenggara Province and

(8) Non Governance Organization Save the Children. Based on the information obtained from the interviews, East Nusa Tenggara Province is still taking convergence actions to accelerate the reduction of stunting prevalence in the area. This cross-sectoral involvement is further strengthened by the East Nusa Tenggara Governor's Decree on the establishment of the Commission for the Acceleration of Stunting Reduction. Therefore, there is a need for optimization in convergence actions between sectors, so as to achieve the expected stunting reduction target.

**Keywords:** COVID-19, collaborative governance, stunting, East Nusa Tenggara

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## INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic is pushing everyone in the prevention of harm and perceived losses. The surge in COVID-19 resulted in the return of the endemic which then became a triggering factor for various other health threats such as stunting. Stunting is a condition of toddlers who experience growth failure due to chronic malnutrition and recurrent infections, especially in the first 1000 days of life (Central Bureau of Statistics, 2020). If children are stunted in the first two years of life, it will cause several negative impacts that are difficult to fix, namely the condition of child growth failure, decreased school achievement index and risk of chronic disease (UNICEF, 2021). According to the UNICEF, WHO, and the World Bank inter-agency team update, 22.7% children under five years of age are stunting in 2020 (UNICEF/WHO/World Bank Group, 2023). The prevalence of stunting in 2020 has decreased in 2022 but is still more than 20%; so, priority efforts

are needed to overcome it (UNICEF/WHO/World Bank Group, 2023). Southeast Asia is one of the regions that contributes a large stunting rate of at 27.4% (Herawati *et al*, 2013). Meanwhile, Indonesia ranks third in ASEAN by the results of the Indonesian nutrition study in 2021 showing that the stunting rate in Indonesia was 24.4% with the highest prevalence in East Nusa Tenggara Province at 37.8% (Indonesian Ministry of Health, 2021b). Of course, this figure is still far below the target of reducing the prevalence of stunting in Indonesia by 30% (Khan and Islam, 2017). Therefore, based on these figures, it is necessary to accelerate efforts to overcome stunting by the government in Indonesia.

The Indonesian government established the 2020-2024 National Medium-Term Development Plan (Government of Indonesia, 2020), in which the essence of national development is to create quality and competitive human resources. Reducing the prevalence of stunted children is one indicator of the fulfillment of the objectives of health development in Indonesia. The Indonesian President set a policy target to reduce the prevalence of stunting in Indonesia by 14% in 2024 (Government of Indonesia, 2021). However, during the COVID-19 pandemic, stunting prevention policies in Indonesia experienced various challenges from several sectors. One of them is the budget allocation for stunting prevention to overcome the COVID-19 pandemic in recent years (Muhafidin, 2022).

The adjustment of stunting prevention after the COVID-19 pandemic requires extensive multidisciplinary cooperation and the need for stakeholders roles in its prevention efforts (Mihreshahi *et al*, 2019). Collaboration between stakeholders is needed to achieve stable health targets, especially stunting. Intervention efforts from the government are divided into sensitive interventions and specific interventions. Specific nutrition interventions have been shown to reduce prevalence

rates because they are targeted directly at their targets (WHO Indonesia, 2022). While nutrition-sensitive interventions are activities aimed at targeting families and communities (Indonesian Ministry of Health, 2019). Interventions that can be done to change health behavior in the community can be done by counseling (Supriyadi *et al*, 2021). Specific nutrition interventions are carried out by the Ministry of Health through Community Health Centers (Puskesmas) and Integrated Service Posts (Posyandu). Nutrition-sensitive interventions are carried out by other sectors outside of health, such as the Ministry of National Planning and Development, Ministry of Agriculture, Ministry of Social Affairs, Ministry of Education and Culture; this stakeholders cooperation has been regulated in Presidential Regulation No. 42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement (Indonesian Ministry of Health, 2019; Government of Indonesia, 2013).

In an effort to deal with stunting, collaborative governance dynamics are needed to work together in reducing stunting in East Nusa Tenggara. This study aimed to determine the effect of collaborative governance dynamics on stunting management post-COVID-19 pandemic in the East Nusa Tenggara Province Region. The results of the assessment can be useful for policy making in regard to stunting prevention in Indonesia.

## MATERIALS AND METHODS

This study was a qualitative research with informant triangulation. It was conducted in 8 organizations with 1 informant representing each organization. This research focused on describing the collaborative governance dynamics between stakeholders in efforts to overcome stunting in East Nusa Tenggara after the COVID-19 Pandemic. The research was

conducted in August 2023 in East Nusa Tenggara. Data collection was carried out by means of in-depth interviews using an interview guideline. The data were data taken directly through interviews with resource persons in this study. The informants represented his/her respective organization namely (1) Regional Research and Development Planning Agency of East Nusa Tenggara Province, (2) Family Planning Agency, Youth and Toddler Family Development, National Population and Family Planning Board of East Nusa Tenggara Province, (3) Office of Women's Empowerment and Child Protection of East Nusa Tenggara Province, (4) Office of Agriculture and Food Security of East Nusa Tenggara Province, (5) Family Welfare Empowerment of East Nusa Tenggara Province, (6) Oesapa Community Health Center, (7) Health and Civil Registration Office of East Nusa Tenggara Province and (8) Non Governance Organization Save the Children. Information analysis was carried out through a process: data entry using transcripts, data reduction, data presentation in a matrix, and conclusion drawing.

This research has gone through an ethical testing process and was approved by the Politeknik Kesehatan Kemenkes Malang Research Ethics Commission with reg number:617/KEPK-POLKESMA/2022.

## RESULTS

Table 1 describes the information of informants who represented the Organizations.

Based on the results of the interviews, several important facts were revealed. Efforts to accelerate stunting prevention in East Nusa Tenggara Province are still ongoing. Through Decree of the Governor of East Nusa Tenggara Province number 324/KEP/HK/2018 (East Nusa Tenggara Provincial Government, 2018), a commission to accelerate

Table 1  
Focus group questions

Informant	Organization	Position	Duration of working in the organization
Informant 1	Health and Civil Registration Office of East Nusa Tenggara Province	Head of Family Health and Nutrition	+5 years
Informant 2	Regional Research and Development Planning Agency of East Nusa Tenggara Province	Head of Social Welfare Sector	+5 years
Informant 3	Family Planning Agency, Youth and Toddler Family Development, National Population and Family Planning Board of East Nusa Tenggara Province	Head of Stunting Prevention	+5 years
Informant 4	Office of Agriculture and Food Security of East Nusa Tenggara Province	Member of Food Security and Extension Group	+5 years
Informant 5	Family Welfare Empowerment of East Nusa Tenggara Province	Secretary of the Organization	+10 years
Informant 6	Oesapa Community Health Center	Nutritionist	+7 years
Informant 7	Non-Governance Organization Save the Children	Field staff	+3 years
Informant 8	Office of Women's Empowerment and Child Protection of East Nusa Tenggara Province	Head of the field of improving the quality of life of women and families	+10 years

stunting prevention was formed. The commission consists of various cross-sectors. The involvement and division of roles across sectors are also included in the strategic plan of the East Nusa Tenggara Provincial Health Office for 2019-2023 (East Nusa Tenggara Provincial Health Office, 2019).

*“The implementation of tasks by the Health Office is in accordance with its main tasks and functions, namely specific nutrition interventions. The intervention programs carried out are the provision of nutritional supplements, vitamin A, blood supplement tablets for adolescent girls and pregnant women, provision of supplementary feeding to pregnant women with chronic energy deficiency and toddlers, management of malnutrition, provision of formula 100 in malnutrition, active screening of malnourished children through family banding, and immunization and deworming of children under five years of age” - Informant 1*

*“The Regional Research and Development Planning Agency of East Nusa Tenggara Province has conducted convergence, assessment, assistance for convergence actions to accelerate stunting reduction, a situation analysis of the distribution of existing stunting prevalence, assessments and training for implementers, namely districts and cities, and provided rewards to district/city level Regional Research and Development Planning Agencies that successfully reduced prevalence rates and implementing the program well. In addition, we also conducted mapping and planning for next year’s work program by conducting ‘Rembuk’ on stunting. The Regional Development Planning Research and Development Agency is the coordinator and planner of the division of tasks for stunting prevention... The program that has been implemented by the Regional Research and Development Planning Agency is in accordance with the Minister of Home Affairs Regulation No. 90, it is just a matter of how to concretize it.” - Informant 2*

*“Being a Coordinator of accelerating stunting reduction forming several programs such as TPPS (Stunting Reduction Acceleration Team) on a national, district, and village scale, chaired by the deputy governor according to the decree related to the commission for the acceleration of stunting reduction in East Nusa Tenggara Province Number 324/KEP/HK/2018. Concrete programs currently being run include assistance for groups vulnerable to stunting through the healthy kitchen program to overcome stunting and the foster parent program. Currently, the program is also being disseminated through the Generation Planning (Genre) Ambassador. - Informant 3*

*“Agricultural extension workers assisted the community to explain how to plant and manage a good garden and post-harvest. The agriculture and food security office requested data on the weight and stunting condition of toddlers after this activity. collaborative work to determine targets according to the decree that will be given sustainable food yard assistance.” - Informant 4*

*“PKK (Family Welfare Empowerment of East Nusa Tenggara Province) itself plays a role in sensitive intervention. The program is more about empowerment that leads to strengthening the family to strengthen independence, especially in the family’s ability to manage the family such as caring for and raising children.” - Informant 5*

*“The head of the Office of Women’s Empowerment and Child Protection of East Nusa Tenggara Province (DP3A) is in the structure of the accelerated stunting reduction team or East Nusa Tenggara Provincial Social Recovery and Development Center Province as the coordinator for sensitive interventions. DP3A itself plays a role in the family quality improvement program which is one of its programs targeting at prospective brides because they will soon form a family so understanding of a quality family for stunting prevention as early as possible can educate and socialize about what a quality family is seen from 5 dimensions, namely legality, physical resilience, economic resilience, socio-cultural resilience, and social psychological*



*resilience. DP3A also provides an understanding of the first 1000 days of life, prevention and handling of stunting as easily as possible. In addition, there are activities to increase the role of fathers to be able to help mothers breastfeed children through exclusive breastfeeding for 6 months or commonly referred to as the father's program which aims to achieve gender equality in the family to fulfill food through exclusive breastfeeding."* - Informant 6

*"Save the children is currently intensifying the BISA (Better Investment for stunting alleviation) Project in collaboration with international nutrition experts to educate the public, especially mothers and mothers-to-be, about feeding infants and toddlers, this is one of our forms of caring for stunting."* – Informant 7

*"We control stunting by following the direction of the health department, namely by providing specific and sensitive nutrition interventions, each of which has rules from the health ministry. All that remains is for us as the implementers below to carry it out."* – Informant 8

In carrying out their roles according to the focus of each institution's field, the sectors involved in reducing the prevalence of stunting in East Nusa Tenggara have collaborated. because stunting has become a public health issue so that overcoming it is not only the responsibility of the health sector, namely the health service and community health centers, but also all sectors including non-governmental organizations. The East Nusa Tenggara Provincial Health Office and the Oesapa community health center collaborated with the United Nations Children's Fund to carry out specific nutrition interventions. The program consists of providing each mother with a toddler an upper arm circumference measuring device to empower families to measure upper arm circumference independently. At the National Population and Family Planning Agency for East Nusa Tenggara Province, collaboration is carried out with the Ministry of Public Works and Public Housing in regard to environmental sanitation.

The Agriculture and Food Security Department also engages in collaboration with the Ministry of Public Works and Public Housing. Meanwhile, the East Nusa Tenggara Province Family Welfare Empowerment Group has primarily collaborated with regional community empowerment regarding increasing the capacity of cadres and health services because it focuses on public health. Apart from that, at the non-governmental institution, Save the Children, collaboration has been carried out together with the education department and the health department with the main focus being education regarding careless food consumption. This statement is supported by several informants as follows.

*“Yes, Save the Children is collaborating with the Education Department and the Health Service in the form of counseling about unhealthy snacks for elementary school children involving nutritionists from the Health Service.” - Informant 7*

*“The closest and most important collaboration is with the Community and Village Empowerment Office (PMD) service because it focuses more on increasing the capacity of cadres and the health service because it focuses on public health.” - Informant 5*

*“With the Ministry of Public Works and Public Housing (PUPR), usually the relevant parties request sanitation data for further follow-up.” - Informant 3*

*“Mother was given a lila ribbon by cadres, received assistance from UNICEF, we collaborated.” - Informant 1*

Collaborative governance dynamics between stakeholders in East Nusa Tenggara province have certainly changed due to the COVID-19 pandemic. The government sector, namely the health department, admitted to experiencing obstacles with other health sectors, namely the National

Population and Family Planning Agency of East Nusa Tenggara Province due to overlaps in the implementation of interventions. This was also acknowledged by the agency that the relationship between the two governments needed further guidance so that the programs designed could run better. According to the Regional Planning, Development, Research and Development Agency of East Nusa Tenggara Province, the obstacles experienced after the COVID-19 pandemic were related to the lack of community participation and awareness regarding the prevention of stunting. Another case at the Agriculture and Food Security Office of East Nusa Tenggara province, the main obstacle that occurred was about drought so that the majority of East Nusa Tenggara people lacked of water. In addition, limited funds for direct review or monitoring to local districts/cities prevented the East Nusa Tenggara Provincial Agriculture and Food Security Office from going directly, leaving it entirely to the district/city Agriculture and Food Security Office. This was also due to expensive transportation costs because East Nusa Tenggara Province was located on an archipelago. Meanwhile, the Office of Women's Empowerment and Child Protection of East Nusa Tenggara Province and the Oesapa Community Health Center experienced budget re-focusing due to the COVID-19 pandemic, so there were several programs that had not been running because the implementation budget was not yet available. This is supported by the informants' statements as follows.

*"There is a lack of communication between the health office and the National Population and Family Planning Agency, which can be an overlap in carrying out their roles."* – Informant 1

*"Convergence with the government has not gone well so there is a lot of overlap, hopefully it can be run better."* - Informant 3

*"The province does not go directly to monitor local districts/cities due to budget constraints because East Nusa Tenggara is located on an archipelago. The biggest obstacle is the availability of water. East Nusa Tenggara is dry and often lacks water."* - Informant 4

*"The post-COVID-19 obstacle experienced is the absence of a budget, if there is no budget, the implementation of the program is hindered."*  
- Informant 8

## DISCUSSION

Stunting, according to the world Health Organization (WHO), is a growth and development disorder in children due to poor nutrition and frequent infections, especially in the first thousand days of life, which is when they are still in the womb until 23 months old (WHO, 2015). The problem of stunting is a description of the failure of child development and growth that can begin in the womb or after birth due to insufficient nutritional intake. The stunting issue is a public health problem related to the increased risk of morbidity, mortality and growth retardation both motorically and mentally, so stunting is classified as a nutritional problem that requires considerable attention from the government (Rahmadhita, 2020). The World Health Organization (WHO) target to reduce up to 40% of stunting toddlers in 2025 (WHO, 2014). The Indonesia government itself established the 2020-2024 National Medium-Term Development Plan, in which one of the indicators is to reduce the prevalence of stunted children in Indonesia with a policy target of 14% (Government of Indonesia, 2020). The collaborative dynamics of the government as a form of joint commitment in reducing the prevalence of stunting, was able to make the stunting rate in East Nusa Tenggara province rate of 43.8% in 2019 was reduced to 37.8% in 2021 and 35.3% in 2022 (Indonesian Ministry of

Health, 2019; Indonesian Ministry of Health, 2021a; East Nusa Tenggara Provincial Health Office, 2022).

In handling stunting, efficient and appropriate measures are needed, namely through nutrition interventions which are divided into two components. The first is specific nutrition interventions that contribute 30%, while the second is nutrition-sensitive interventions that have a greater contribution, reaching 70% (Sukanti and Faidati, 2021). This relates to the life of the community in general and as a whole. The implementation of nutrition-sensitive interventions basically aims to involve the whole community without exception, focusing on development in non-health sectors, such as clean water provision, poverty alleviation, gender empowerment, and other aspects. In this study, nutrition-specific interventions were mainly handled by the health office and community health centers. Other agencies focus more on sensitive interventions. Collaboration with other stakeholders such as the private sector, non-governmental organizations (NGOs), and the community also needs to be carried out (Rumra *et al*, 2021). This is in accordance with the instructions in the strategic plan of the East Nusa Tenggara Provincial Health Office for 2019-2023 (East Nusa Tenggara Provincial Health Office, 2019).

Based on this research, policies related to stunting reduction in Indonesia are based on the Presidential Regulation of the Republic of Indonesia No. 72 of 2021 (Government of Indonesia, 2021). The policy was motivated by the National Strategy developed by the national team for accelerating poverty reduction and the National Medium-term Development Plan 2020-2024 (Government of Indonesia, 2020). The policy has been followed up by the East Nusa Tenggara Provincial Government through a decree related to the commission for the acceleration of stunting reduction in East Nusa Tenggara Province Number 324/KEP/HK/2018 (East Nusa Tenggara Provincial Government, 2018) and the Strategic Plan

of the East Nusa Tenggara Provincial Health Office for 2019-2023 (East Nusa Tenggara Provincial Health Office, 2019). To ensure stakeholders commitment, the roles of each sector have been divided to synergize in reducing the prevalence of stunting in East Nusa Tenggara.

In providing these interventions stunting, the East Nusa Tenggara government has collaborated with each other. Collaborative governance is an approach to decision-making and public policy implementation that involves the active participation of various parties who have an interest in a particular issue or problem. In this model, the government is not only the sole decision maker but also involves various stakeholders from the government sector, private sector, civil society, and non-governmental organizations to work together in formulating, implementing, and evaluating policies (Huang, 2020; Saufi, 2021). The goal of collaborative governance is to achieve more effective and sustainable solutions to complex problems by utilizing the knowledge, resources, and involvement of various parties. This model focuses on collaboration, open dialog, and the sharing of responsibility and power among the stakeholders involved (Djara and Jaya, 2021). In the context of addressing health or development issues such as stunting, collaborative governance can help overcome complex challenges involving various sectors and dimensions (Afandi *et al*, 2023; Ipan *et al*, 2021). By involving different parties, this model seeks to maximize the contributions and efforts of various stakeholders to achieve better and sustainable results.

Policies to overcome stunting, stakeholder's coordination and collaborative governance participation are important. If communication and cooperation between sectors go well, efforts to accelerate stunting prevention in Indonesia will run smoothly and effectively (Katmawanti *et al*, 2021). In implementing stakeholders collaboration, the East Nusa Tenggara Provincial Government follow the Presidential Regulation No.

72 of 2021 concerning the acceleration of stunting reduction (Government of Indonesia, 2021) by forming the Stunting Reduction Acceleration Team which consisted of various government agencies aimed to carry out convergence actions to handle stunting. In conducting such collaborative governance, the East Nusa Tenggara government uses an accountability pattern that starts with coordination with stakeholders, then makes a joint commitment which is manifested in the form of a decision letter of the East Nusa Tenggara provincial stunting reduction acceleration team, and coordinates and implements each program that has been agreed upon. This collaborative governance dynamic also occurs in Sleman Regency, Yogyakarta, which has a good impact on reducing stunting in the region (Sukanti and Faidati, 2021).

During the COVID-19 pandemic, collaboration in stunting prevention in East Nusa Tenggara Province experienced various challenges from several sectors. One of them is the budget allocation for stunting prevention which has been diverted to overcome the COVID-19 pandemic. In addition, some offline programs that go to the community such as integrated service post, supplementary feeding are hampered in their implementation. The obstruction of the integrated service post program during the pandemic resulted in a lack of growth monitoring in toddlers (Rumra *et al*, 2021). Meanwhile, the inhibition of supplementary feeding during the pandemic has resulted in some parents, especially mothers, preferring to provide intake in the form of instant food (Katmawanti *et al*, 2021). The COVID-19 pandemic has an impact on increasing the prevalence of stunting, thereby hampering the achievement of the demographic bonus and will result in an increase in the number of children under five who are affected by malnutrition, namely around 15% (Sulistyawati and Widarini, 2022). Several stunting prevention programs were not optimally implemented during COVID-19 pandemic causing an

increase in stunting rates in many parts of the country but not in East Nusa Tenggara Province. Nevertheless, East Nusa Tenggara Province is still ranked as the first province with the highest incidence of stunting (Indonesian Ministry of Health, 2021a).

The end of the COVID-19 pandemic will make all agencies adapt to each other again in implementing the policies that have been set. Stakeholders' collaboration as an effort to accelerate the handling of stunting has experienced obstacles in several sectors. However, the various obstacles that occur are not too significant, because the programs that have been agreed upon are still running and are able to reduce the prevalence of stunting. This is supported by Picaully (2021) who reported that the implementation of convergence actions in East Nusa Tenggara Province has a significant effect on increasing the coverage of stunting reduction interventions.

The East Nusa Tenggara Provincial Health Office is fully tasked with organizing nutrition-specific interventions. The East Nusa Tenggara Regional Development Planning, Research and Development Agency is in charge of coordinating convergence actions, conducting situation analysis related to the distribution of stunting prevalence, assessing and training districts/cities in implementing stunting prevention programs, and planning the preparation of following year's work program. The National Population and Family Planning Agency of East Nusa Tenggara Province plays a role in forming a team to accelerate stunting reduction at the national, district and village levels. The East Nusa Tenggara Provincial Agriculture and Food Security Office plays a role in establishing a sustainable yard or sustainable food area that aims to meet household food and nutrition needs. The East Nusa Tenggara Provincial Family Welfare Empowerment Group plays a role in providing sensitive interventions, especially related to empowering or strengthening families



to strengthen independence in caring for and raising children. The East Nusa Tenggara Provincial Office of Women's Empowerment and Child Protection plays a role in providing sensitive interventions, especially related to improving family quality through education to prospective brides and the father's program to equalize gender in the family for food fulfillment. The Oesapa Community Health Center mainly plays a role in providing specific nutrition interventions because it provides programs that directly tackle stunting. The roles of the East Nusa Tenggara government are also supported by non-governmental organizations such as save the child through several programs, one of which is the BISA project which collaborates with international nutrition experts to educate the public, especially mothers and prospective mothers, regarding feeding babies and toddlers.

From the results of the interviews, it was found that there are dynamics of collaborative governance in each cross-sectoral area. There are still overlapping tasks, even though a stunting prevention commission has been formed. There needs to be an increased commitment between institutions in completing the convergence actions contained in the stunting prevention convergence guidelines. In addition, each organization needs to work together in completing their main tasks and functions according to their organizational background.

In conclusion, the government in Indonesia is aggressively conducting a program to deal with stunting. The President of Indonesia issued a presidential regulation to establish the Stunting Reduction Acceleration Team. The implementation of this stunting program involves cross-sector collaboration. Based on data collection with qualitative methods in the field obtained by interviewing policy makers in each institution, it is stated that there is an influence of collaborative governance and cross-sectoral coordination that occurs between government and

non-government agencies in tackling stunting in the post-COVID-19 pandemic period in East Nusa Tenggara Province.

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## CONFLICT OF INTEREST DISCLOSURE

The authors declare no conflict of interest.

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