Sustainable strategy of Islamic organizations in stunting management: Performance evaluation and impact on the 2025 stunting program in Jember Regency

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ABSTRACT

Stunting is a major public health problem in Jember which is influenced by nutrition, sanitation, and access to services. Efforts to reduce stunting face resource and behavioral constraints, while Islamic organizations such as Nahdlatul Ulama and Muhammadiyah have extensive networks and strategic potential to support national programs through a faith-based approach. This study aims to understand the strategy of Islamic organizations in the Prevention of stunting in Jember. The research method used a mixed methods approach involving 200 board respondents and members; the questionnaire instrument proved to be valid and reliable. The results showed a positive understanding and perception of the organization on the issue of stunting is very high (88-98%). As many as 87% of organizations are actively implementing sustainable strategies such as recitation education, posyandu mentoring, and door-to-door counseling. The support of religious leaders, extensive networks, and the spirit of the members became the main supporting factors. The implementation of this strategy contributes to a decrease in the prevalence of stunting from 34.9% (2022) to about 29.7% (2023). It was concluded that religion-based strategies and collaboration of Islamic organizations are effective in supporting the acceleration of stunting reduction, in line with the national target of 2025. Recommendations include strengthening funding, training cadres, and optimization of monitoring systems for model replication in other areas.

INTRODUCTION

Stunting, a condition of failure to thrive in children due to chronic malnutrition and recurrent infections, is a critical public health challenge in Indonesia, with long-term implications for human and economic development. In East Java, this problem remains significant, hindering the potential of the younger generation and exacerbating the cycle of poverty (1). The etiology of stunting is complex and interrelated, including suboptimal nutritional intake, inadequate feeding practices, limited access to nutritious foods, as well as environments with poor sanitation and clean water that increase the burden of disease (2). Recognizing this urgency, the Indonesian government has set a strategic target to reduce the prevalence of stunting to 14% by 2024, a goal that requires the mobilization and integration of all community resources, beyond conventional sectoral approaches (3).

In the stunting prevention landscape, mass-based Islamic organizations such as Nahdlatul Ulama (NU) and Muhammadiyah emerged as unique and potential non-state actors. Their strength lies in a wide network of grassroots organizations, recognized religious authorities, as well as the ability to mobilize communities and influence social norms and daily behavior (4). Their intervention approaches often integrate health and nutrition messages into the framework of Islamic values, such as the commandment to maintain healthy offspring hifdz al-nasl, responsibility to the family, and the concept of hygiene as taught in the religion. This faith-based education has been shown to be more personalized, contextual, and acceptable, particularly in rural areas where formal health literacy may be low (5). Initiatives such as the" nutrition Park " and training of posyandu cadres who internalize religious values show effectiveness in improving maternal care knowledge and practices (4,6).

The synergy between the government and Islamic organizations is an important catalyst in expanding the scope and impact of stunting prevention programs. Governments provide policy frameworks, technical resources, and funding, while religious organizations offer trusted distribution channels, credible messaging mechanisms, and the ability to reach hard-to-reach populations (2). This collaboration allows the adaptation of national programs into local messages that are in accordance

with the culture and beliefs of the community. For example, the involvement of religious leaders in the socialization of the first 1000 days of life (HPK) program or in the community-based total Sanitation (STBM) campaign can increase acceptance and compliance (6). This kind of partnership also helps in data collection and community-based monitoring, so that interventions can be more targeted.

However, behind such great potential, there are areas of controversy and challenges that need to be recognized. Some hypotheses question the capacity readiness and consistency of religious organizations in dealing with complex technical health issues, as well as the sustainability of programs beyond specific projects. Other challenges include variations in understanding and priorities among religious leaders, sometimes fragmentative coordination with formal health systems, and internal organizational resource constraints (6). Furthermore, the structural roots of stunting—such as poverty, inequality, and access to basic services cannot be solved solely through community-based behavioral change approaches, even if mediated by religion. This creates a divergence in coping strategies, between a focus on individual-family education versus advocacy for systemic change and rights fulfillment.

The local context reinforces the urgency of in-depth analysis. Jember Regency in East Java is an important microcosm, where the prevalence of stunting has been recorded very high, namely 39.2% (7). At the same time, Jember has a strong and active network of Islamic organizations. Initiatives such as the "Bangga Kencana" program by Fatayat NU and "Rumah Gizi" by Nasyiatul Aisyiyah have been implemented in this area (8). However, the effectiveness, impact, and success factors of strategies driven by Islamic organizations in Jember have not been explored systematically. Evaluation of their role in lowering stunting rates from very high levels is becoming more urgent.

Therefore, this study aims to conduct a comprehensive investigation of the strategies and contributions of Islamic organizations in the Prevention of stunting in East Java, with in-depth case studies in Jember. The significance of this study is to provide strong empirical evidence regarding the models and mechanisms of collaboration between religious and public health actors, as well as identifying factors that facilitate or hinder its success. By reviewing various existing initiatives, analyzing stakeholder perceptions, and evaluating the results, this study seeks to fill the literature gap between recognized potential and measurable evidence of impact. The main expected conclusion is an operational framework and a set of specific policy recommendations to strengthen the role of Islamic organizations as effective and sustainable strategic partners in national efforts to achieve stunting reduction targets, while contributing to the global discourse on the role of faith-based actors in health development.

METHODS

This study uses the approach mixed methods sequential explanatory design, which integrates quantitative and qualitative methods sequentially to obtain a comprehensive understanding. The initial stage is a quantitative survey to map the perception and involvement of Islamic organizations at large, followed by qualitative studies through interviews and FGDs to explore the mechanisms, challenges, and strategies behind the survey data.

The subjects of the study were active Islamic organizations in Jember Regency who have programs related to maternal and child health or nutrition. Samples were taken purposive from various sub-districts, including large organizations such as NU and Muhammadiyah (along with its autonomous bodies) as well as other organizations such as LDII, Persis, and pesantren. Respondents are managers, cadres, or members who are directly involved in the stunting program.

Data collection was done with two main instruments:

1. Likert scale (1-5) closed questionnaire to measure understanding, perception, engagement, supporting, and inhibiting factors quantitatively.
2. In-depth interview guides and semi-structured FGDs to qualitatively explore the Strategy, Impact, Sustainability and recommendations of the program.

Quantitative Data were analyzed descriptively by calculating the percentage of responses using SPSS. Qualitative Data were analyzed with the Miles, Huberman, and Saldana (9) model through data reduction, Matrix presentation, and thematic inference. The validity of the data is maintained through instrument validity-reliability test (quantitative) and source triangulation (qualitative). The integration of the two data is carried out at the interpretation stage to compile holistic findings and recommendations.

RESULTS AND DISCUSSION

Based on the results of field research through interviews, observations, and documentation studies, the handling of stunting in Jember Regency not only involves local governments and health workers, but also Islamic organizations as strategic partners. The involvement of Islamic organizations is considered effective because it is supported by a wide social network, emotional closeness to the community, and strong religious legitimacy.

The most active Islamic organizations in the prevention and control of stunting in Jember came from Nahdlatul Ulama (NU) and its autonomous bodies, as well as Muhammadiyah through ‘Aisyiyah. The results of the interview showed that education and socialization are the main programs carried out. This activity is carried out formally and informally, such as through routine recitation, taklim Assembly, meeting of mothers, PKK forum, to early childhood education an informant from NU Muslimat convey: *“At majelis Ta'lim when mothers gather, we always try to avoid stunting for our children and grandchildren.”*

Education provided includes an understanding of the dangers and impacts of stunting, the importance of balanced nutrition and PHBS, the risk of early marriage, as well as monitoring the growth and development of children through posyandu. The socialization approach is carried out with simple language and the *“from person to person”* method, so that health messages are more easily understood and accepted by the public.

The implementation of stunting prevention programs is carried out through an established organizational structure. NU uses a tiered structure based on the region, ranging from Pcnu District, MWC Nu Sub-District, to Nu village branches. Health programs are coordinated through autonomous bodies such as Muslimat NU and Fatayat NU, which have direct proximity to pregnant women, mothers under five, and families. Many administrators of autonomous bodies also act as posyandu or PKK cadres, thus strengthening the integration of organizational programs with village activities to the RT/RW level.

Meanwhile, Muhammadiyah runs the program through a more centralized structure based on charity efforts. The Program was coordinated by Muhammadiyah regional leadership (PDM) with technical implementers involving ‘Aisyiyah, LAZISMU, and the network of hospitals, clinics, and posyandu assisted. This approach integrates promotive-preventive education with formal health services. Examples include the provision of tablets added Blood (TTD) for adolescent girls, nutritious food processing training based on local materials such as Bran, as well as MP-ASI education according to WHO standards, which is often carried out through collaboration with the University of Muhammadiyah Jember and local governments.

The results of interviews and document searches show that the vision of Islamic organizations in Jember is oriented to the realization of families and communities that are healthy, prosperous, and

empowered, with the Prevention of stunting as a priority for the development of future generations. In NU, the vision is integrated in an effort to maintain the benefit of the people according to the teachings of Ahlussunnah wal Jamaah, where maternal and Child Health is seen as a religious and social responsibility. A member of the Board of Directors, Mrs. Nehemiah, said: *"the health of children is part of our religious mandate. If the child stunting, it means we failed to keep the benefit of the people. That's why we are active in posyandu, so that mothers understand nutrition from the beginning of pregnancy."*

This quote reflects the integration of religious values in NU's vision. Temporary that, an administrator ' Aisyiyah (mother Fitroh) revealed: *"Our vision is to create a healthy society through real da'wah. Stunting prevention is not only medical, but also Social, such as educating young women to be ready to be healthy mothers."*

This shows the explicit approach of Muhammadiyah in combining social services with health prevention. The mission that accompanies the vision is realized in a continuous program of synergy between the two organizations, with the results of the interview showing the following four main directions:

1.) Strengthening education and Health Awareness: utilizing recitation forums, taklim assemblies, regular meetings, student KKN, and MPASI demonstrations to convey the message of balanced nutrition, parenting, and the dangers of stunting, with a religious-based approach in NU and more structured in Muhammadiyah. A Muslim PAC manager NU (Ibu Nanik) in an interview said: *"In recitation, we insert lectures about nutritious eating. Mothers are more obedient from a religious perspective, not just doctors."*
2.) Maternal and Child Health Assistance: through active involvement in posyandu, monitoring of pregnant women/toddlers, provision of PMT, as well as assistance to families at risk of stunting, which is integrated with puskesmas and growth and Development monitoring. Quote from the board of PDM Muhammadiyah: *"we accompany from pregnant to toddlers, including routine weight checks. This is part of our mission to prevent stunting from an early age, so that Muhammadiyah children grow optimally."*
3.) Empowerment of cadres and strengthening of basic services: training and workshops for health cadres, both through concurrent positions of village cadres in NU and charity efforts in Muhammadiyah, make cadres as the spearhead of prevention with the cooperation of health professionals. A cadre of ' Aisyiyah (mother Khusnul Khotimah) mentioned: *"Training from the university makes us more confident. Now we can teach mothers to make MPASI from local ingredients, such as cheap but nutritious Bran."*
4.) Cross-sector collaboration: establish partnerships with village governments, puskesmas, health offices, and universities, such as the TTD remaja program with the Jember Health Office or the National Convergence Initiative to reduce stunting. Quote from PAC Muslimat NU Jombang board (Ibu Umi hanik): *"we cannot be alone, so collaboration with puskesmas is important. As a result, the stunting program in our village is more effective, because it combines the power of religion and government."*

Ms. Hanik added that the stunting prevention strategy in Jember Regency involves several comprehensive programs and policies including the Gemar Jelita Program: Gerakan Masyarakat Peduli Kesehatan Anak dan Wanita (Gerakan Masyarakat Peduli Kesehatan Anak dan Wanita), which aims to increase public awareness of the importance of children and women's health.

This integrated vision and Mission approach shows the strong commitment of NU and Muhammadiyah in supporting the national target of stunting reduction, with increasingly measurable

and complementary synergies in Jember Regency. However, while established organizational structures and community-based approaches have made significant contributions, there are still variations in understanding, perception, implementation strategies, and challenges that affect program impact and sustainability. These findings are the basis for analyzing the effectiveness of the role of Islamic organizations in supporting the national target of reducing stunting until 2025, as well as formulating practical recommendations to improve synergy between institutions and the community. Therefore, the discussion of the results of this study focused on the following seven main problem formulations:

Understanding of Islamic organizations in Jember against Stunting as a public health issue

a.) Understanding of Islamic organizations in Jember against Stunting

Data collection on the level of understanding of Islamic organizations against stunting was carried out through the distribution of questionnaires to 200 respondents from various Islamic organizations in Jember Regency. The results showed that the level of understanding of the respondents was classified as very good, which is indicated by the high percentage of agreed and highly agreed answers on all indicators. Where as many as 92.8% of respondents understand that stunting is a condition of failure to grow due to chronic malnutrition, while 91.8% of respondents know that stunting can affect a child's brain development. In addition, 87.9% of respondents are aware that stunting has a long-term impact on children's health and intelligence. The understanding of prevention is also very strong, 97.8% of respondents stated that stunting prevention should start from pregnancy, and 92.8% of respondents were aware of the importance of nutritional interventions in the first 1,000 days of life. This Data shows that Islamic organizations in Jember have a strong knowledge base in understanding the issue of stunting as a public health problem.

b.) Perception of Islamic organizations in Jember against the causes of Stunting

Based on the general understanding of stunting that has been described, the next analysis focused on the perception of Islamic organizations in Jember regarding the causes of stunting. The results of the questionnaire analysis showed that the perception of Islamic organizations is in the high category. This finding shows that Islamic organizations have a comprehensive and multidimensional understanding, viewing stunting as a complex problem influenced by economic, social, health, environmental, and cultural factors, not as a single issue.

Economic factors are still perceived as a cause of stunting, with 72.0% of respondents agreeing and strongly agreeing that poverty contributes to stunting. However, family knowledge and behavior factors were considered more dominant, indicated by 84.1% of respondents who assessed the low knowledge of parents about nutrition and 86.8% who stated unbalanced diet as the main cause of stunting.

In addition, environmental and health factors also obtained high approval rates, where 82.4% of respondents stated that poor sanitation and environment increase the risk of stunting, and 91.2% assessed limited access to health services as a risk factor. Socio-cultural factors, particularly early marriage, were also understood to be important causes, with 82.9% of respondents expressing agreement and strongly agreeing.

Overall, these findings indicate that Islamic organizations have a holistic perception of the causes of stunting that includes economic, knowledge, health, environmental, and socio-cultural factors, which are the foundation in designing a comprehensive and sustainable stunting prevention strategy.

Perception among Islamic organizations in Jember related to the importance of stunting Prevention

In addition to a high level of understanding, the results of the questionnaire also showed that Islamic organizations in Jember have a very positive perception of the importance of stunting prevention. Based on Likert scale analysis, the perception of respondents in the category of high to very high, which is reflected in the dominance of the answers agree and strongly agree on all the indicators proposed.

Most respondents viewed stunting prevention as a moral responsibility of Muslims (92.3%) and as an important issue that should be of concern to Islamic organizations (93.9%). This perception is accompanied by a strong awareness of the educational role of the organization, indicated by 97.2% of respondents who assess the need for special education for pilgrims and 95.0% who view religious leaders as having a strategic role in the socialization of stunting prevention. In addition, 94.5% of respondents stated that the stunting prevention program was in line with the value of amar Ma'ruf nahi munkar.

The high approval of the need for active involvement of Islamic organizations in stunting prevention campaigns (96.7%) reflects strong normative and institutional commitments. Overall, these findings indicate that positive perceptions of Islamic organizations are an important foundation in encouraging active involvement and strengthening stunting prevention strategies in Jember Regency.

Sustainable strategies implemented by Islamic organizations in Stunting Prevention in Jember Regency in the 2025 Stunting Program

a.) Stunting prevention strategy by Nahdlatul Ulama (NU) and its Autonomous Bodies

Based on the results of the interview, the stunting strategy implemented by NU in Jember Regency is community-based, cultural, and participatory. This strategy is driven through the structure of NU to the level of branches and autonomous bodies, especially Muslimat NU and Fatayat NU, which have direct proximity to pregnant women and mothers under five.

NU's main strategy focuses on religious education through recitation, majelis taklim, and regular meetings, with materials covering the importance of balanced nutrition, exclusive breastfeeding, nutritious complementary feeding, the dangers of stunting, and the Prevention of early marriage. The delivery is done with simple language and cultural approach so that it is easily accepted by the community.

In addition to education, NU strengthens existing posyandu services through the involvement of cadres from NU and PKK pilgrims, without forming new health services. Nutritional interventions are carried out through supplementary feeding (PMT), egg and milk distribution, as well as Social Solidarity-based ALMS programs such as one egg alms. NU also provides informal assistance to families at risk of stunting through home visits, monitoring toddlers, and assisting pregnant women. Overall, NU's strategy is inclusive and deep-rooted, with its main strength in networking and emotional closeness to the community to the very bottom.

b.) Stunting management strategy by Muhammadiyah and Ortom

The results of the interview showed that stunting management strategy by Muhammadiyah in Jember was structured, systematic, and institution-based. The implementation of the strategy was coordinated by the regional leadership of Muhammadiyah (PDM) with the involvement of autonomous organizations, especially ‘Aisyiyah, as well as charitable efforts in the field of Health and social affairs. An informant is Mr. Safrudin Edi Wibowo, Vice Chairman of PDM Muhammadiyah said that: *"Muhammadiyah views stunting as not only a medical problem, but also*

a socio-structural problem related to poverty, maternal education, sanitation, parenting, and access to health services. Therefore, efforts to reduce it are carried out integratively, involving business charities, assemblies, and autonomous organizations".

Muhammadiyah strategy includes four main approaches. First, the preventive-promotive approach through maternal and toddler nutrition education, prevention of anemia and SEZ in adolescent girls, and the 1000 HPK campaign, which is carried out through hospitals, clinics, assisted health centers, and community posyandu. Second, the strengthening of families and women through 'Aisyiyah, including parenting education, nutritional literacy, and assistance for pregnant and breastfeeding women, through the Aisyiyah prevent Stunting Movement program and Aisyiyah Posyandu. Third, socio-economic interventions through nutritious food assistance, improved sanitation, and economic empowerment of vulnerable families, which are channeled through LAZISMU and zakat, Infaq, and ALMS programs. Fourth, disaster response and vulnerable areas through MDMC, focusing on nutritious food distribution, Maternal-Child Health Services, and sanitation recovery. Muhammadiyah's strategy is characterized by data-based planning, professional implementation, and relatively strong management and resource support.

c.) Comparative analysis of NU and Muhammadiyah strategies

Based on the results of the interview, the differences in NU and Muhammadiyah strategies did not show opposition, but complementary patterns. NU excels in the cultural approach and grassroots community networking, while Muhammadiyah excels in the institutional approach and formal health services. Thus, the synergy between NU and Muhammadiyah has great potential in strengthening stunting prevention in Jember, especially if collaborated within the framework of local government programs.

The Impact of The Implementation of The Islamic Organization Strategy to Reduce Stunting Rates in Jember

Islamic organizations in Jember, especially Nahdlatul Ulama (NU) and Muhammadiyah, have a strategic role in supporting the reduction of stunting through a community-based approach that is aligned with Islamic values. With an extensive network up to the village level through NU branches, taklim assemblies, Islamic boarding schools, and Muhammadiyah branch leaders (PCM) in all 31 districts, Islamic organizations become important partners of local governments in delivering health and nutrition messages. Jember District Health Office Data shows a decrease in the prevalence of stunting from 10.80% in 2019 to 7.71% in 2025. This decline is inseparable from the contribution of Islamic organizations that effectively reach rural and suburban communities. Districts with strong Islamic organizational bases, such as Wuluan, Bangsalsari, and Sumberbaru, show consistently low stunting rates (below 3% by 2025), which indicates the effectiveness of religious approaches in encouraging behavioral changes related to nutrition, hygiene, and child care.

NU's community-based and cultural strategies, such as education through recitation, strengthening posyandu by Muslimat and Fatayat NU cadres, and charity-based nutrition interventions, have proven to expand the reach and encourage changes in people's behavior. Meanwhile, Muhammadiyah's more institutional approach through its health care network, 'Aisyiyah program, and LAZISMU support contributes to more measurable monitoring and empowerment of women. The collaboration of the two organizations with local governments, as mandated in Presidential Regulation Number 72 of 2021, supports the implementation of specific and sensitive nutritional interventions in a synergistic manner.

The results of the questionnaire analysis showed that 84.1% of respondents stated that their organization collaborated with the government or puskesmas, especially in posyandu assistance,

maternal and child health counseling, and the implementation of PMT. In addition, 81.8% of respondents actively disseminate nutritional information through religious forums, so that Islamic organizations play an effective role as a link between formal government programs and the needs of local communities.

The high level of support for increased organizational engagement (96.7%) reflects a strong normative and institutional commitment to expanding cross-sector cooperation. Overall, this collaborative and sustainable mechanism, through the integration of religious-cultural approaches and formal health programs, strengthens the position of Islamic organizations as strategic partners of local governments in accelerating the reduction of stunting in Jember Regency.

However, in some districts with a high prevalence of stunting such as Rambipuji, Sumberjambe, and Kaliwates, the participation of Islamic organizations needs to be intensified through more targeted and measurable programs. Closer synergy between the district government, health office, and branch management of Islamic organizations is key to accelerating the convergence of sensitive and specific nutritional interventions in priority areas.

Factors supporting and inhibiting the success of Islamic organization strategies in efforts to overcome Stunting

a.) Supporting Factors

Supporting and inhibiting factors are important aspects in assessing the effectiveness of the implementation of stunting prevention programs run by Islamic organizations. The success of a program is not only determined by the level of understanding and commitment of the organization, but also influenced by the availability of resources, social environmental support, as well as the internal capacity of the organization in carrying out activities on an ongoing basis. Therefore, the analysis of supporting and inhibiting factors is a crucial step to understand the extent to which stunting prevention programs can be optimally implemented at the community level.

The support of religious leaders is the most dominant supporting factor, with 96.7% of respondents agreeing and strongly agreeing that the role of religious leaders is very helpful in the implementation of stunting prevention programs. This confirms that the legitimacy and influence of religious leaders contribute significantly to the acceptance and effectiveness of the program in the community. In addition, 97.3% of respondents rated the wide network of organizations as important social capital in strengthening stunting prevention programs, as it allows for more effective dissemination of information, mobilization of resources and coordination. Another supporting factor is the high motivation of members of the organization, where 94.0% of respondents stated that members have a strong spirit and commitment in supporting the program. Overall, these findings indicate that the internal capacity and social networks of Islamic organizations are key factors in the successful implementation of stunting prevention programs.

Based on the results of interviews, the success of stunting prevention programs by Islamic organizations in Jember supported by the synergy of internal and external factors. The main internal factors include the availability of competent and committed human resources, such as posyandu cadres, volunteers, and administrators who understand stunting issues, as well as organizational cohesiveness, a spirit of togetherness, and effective communication as social capital in the sustainability of the program.

From the external side, cross sector support and collaboration especially with village governments, puskesmas, PKK, and Related Agencies-enables the integration of policies, funding, and health services such as posyandu, immunization, and PMT. The role of religious leaders and community leaders is also effective in increasing public participation and awareness. In addition,

increased family awareness about nutrition, parenting, and PHBS, as well as economic support through nutritious food assistance and social philanthropy, helped strengthen stunting prevention efforts. Overall, the success of the program is highly dependent on the synergy of the organization's internal capacity, cross-sector support, and active community participation.

b.) Program Impelementation Inhibition Factor

On the contrary, in addition to the existence of various supporting factors, the results also showed that Islamic organizations in Jember faced a number of inhibiting factors in the implementation of stunting prevention programs. These inhibiting factors are sourced from internal aspects of the organization as well as the external environment that affect the effectiveness and sustainability of program implementation.

Limited funding is the main obstacle, with 79.6% of respondents agreeing and strongly agreeing that the funding aspect hinders the implementation of stunting prevention programs. In addition, the limited capacity of human resources is also significant, indicated by 84.6% of respondents who assess the lack of knowledge of members and 81.8% who call the lack of volunteers as an obstacle to implementation. Socio-cultural factors and external support are also obstacles, where 82.9% of respondents stated that certain local habits make it difficult to socialize stunting prevention, and 84.6% considered that the lack of external support complicates the implementation of the program. These findings indicate that the success of stunting prevention programs is determined not only by the organization's internal readiness, but also by socio-cultural conditions and synergies with outsiders.

Based on the results of interviews, the main obstacle to Islamic organizations in the Prevention of stunting in Jember is the low awareness and understanding of some people about the long-term effects of stunting. Some parents still consider stunting as a hereditary factor or destiny, and do not understand the importance of balanced nutrition, immunization, posyandu visits, and proper parenting. Cultural barriers also arise in the form of rejection of immunization, aversion to posyandu, and the habit of giving children less nutritious food.In addition, structural and technical barriers include limited human resources, funding, and support facilities. The lack of budget and the number of cadres or volunteers limit the reach and equitable distribution of programs, especially in remote areas. Economic factors of the target family, weak coordination across sectors, time constraints, and limited accurate data also complicate the implementation of the program. Overall, these findings indicate that stunting prevention requires changes in community behavior, strengthening organizational capacity, as well as policy support and sustainable funding as the basis for the formulation of more effective mitigation strategies.

Efforts implemented by Islamic organizations for the sustainability of Stunting prevention programs until 2025.

Based on the results of interviews, the informants confirmed that the main strategy in overcoming obstacles to stunting prevention programs is through humanitarian and relational approaches. Emotional closeness is built through patient, repeated education, and using simple language, either through recitation, organizational meetings, posyandu, or direct visits to the target family's home. This approach is a means of dialogue to straighten out the wrong understanding of stunting, including the assumption that stunting is a destiny or hereditary factor, and is effective in building trust in people who originally refused immunization or are reluctant to follow posyandu.

To maintain the sustainability of the program, the organization emphasizes commitment and consistency by integrating the issue of stunting into the organization's routine activities, despite facing limited resources. Cooperation with puskesmas, village governments, and health cadres is seen as a

relationship of mutual responsibility, not just formal coordination. Through the spirit of togetherness, mutual assistance, and the value of sincerity, the organization seeks to ensure that stunting prevention remains a sustainable collective movement.

Recommendations of Islamic organizations in improving the effectiveness of prevention and control of Stunting in Jember

Based on in-depth interviews with key informants from Islamic organizations in Jember, recommendations to improve the effectiveness of stunting prevention and response focused on strengthening community-based approaches, cross-sector collaboration, and internal capacity building. This recommendation comes in response to the main findings of the study, where Islamic organizations have successfully integrated religious values in programs, but still face obstacles such as limited funding and cultural resistance. Overall, the recommendations cover five main aspects: (a) contextual and religious value-based continuing education, (b) intensive assistance to at-risk families in plain language, (c) strengthening more formal cross-sector collaboration with local governments, (d) capacity building and appreciation of field cadres, and (e) providing integrated data and sustainable funding to support more equitable interventions.

In this study, information from key informants reinforces the recommendations of Islamic organizations to improve the effectiveness of prevention and control of stunting in Jember. A member of the board of directors (NWO) said: "Education must be continuous, not ceremonial, and adapted to the local context so that people understand that stunting is not destiny, but can be prevented with *religion-based parenting."*

This statement emphasizes the importance of a sustainable and contextual educational approach, by integrating religious values to change people's perceptions of stunting.Meanwhile, a cadre of Islamic organizations (Ibu Faiq) revealed: "Mentoring must be intensive, down directly to the family, not only for PMT but change the parenting style to be sustainable."

This quote reflects the need for direct and holistic interventions at the family level, which focus not only on material assistance such as supplementary feeding (PMT), but also on transforming the child's parenting behavior to achieve long-term impacts. In addition, another informant (Mrs. Mahmudah) added: "Collaboration must be a strategic partner, not just a technical implementer; it needs accurate data and budget support so that the program is evenly distributed."

This expression highlights the need to improve the status of collaboration with the government and related institutions into equal strategic partnerships, supported by valid data and adequate budget allocations to ensure even program coverage throughout the Jember Regency area.

DISCUSSION AND FINDINGS

This discussion aims to interpret research findings by linking them to the theoretical framework, the results of previous research, as well as the context of national and local policies related to the acceleration of stunting reduction. The focus of the analysis is directed to the role of Islamic organizations as community actors in public health interventions based on religious and cultural values in Jember Regency.

Understanding and perception of Islamic organizations against Stunting as a public health issue

The results showed that the level of understanding of Islamic organizations against stunting is in the very high category. Stunting is understood as a condition of chronic malnutrition that has a long-term impact on children's physical, cognitive and productivity growth, in line with the definition of UNICEF and the Ministry of Health. These findings corroborate the research of Malik et al. (10)

which affirms the role of religious extension agents as agents of health education through religious channels.

Within the framework of PRECEDE-PROCEED Model, this understanding serves as a strong predisposing factor, where religious values such as Fard kifayah encourage positive attitudes and readiness of the community to engage in stunting prevention. Islamic organizations ' perceptions of the causes of stunting are also multifactorial, including malnutrition, poor sanitation, access to clean water, and non-optimal parenting. This perception is consistent with the pathogenesis theory of stunting (11) and the findings of Fadlirahman et al. (2) and (6). In the Social Ecological Model (McLeroy et al., 1988), this understanding reflects awareness at the interpersonal and community level, which can be reinforced through Islamic values of cleanliness (thaharah) and family responsibility.

Perception among Islamic organizations in Jember related to the importance of stunting Prevention

Islamic organizations have a very positive perception of stunting prevention strategies through nutrition education, sanitation, and the promotion of healthy lifestyles. This preventive orientation is in line with the principles of the Ottawa Charter for Health Promotion, in particular strengthening community action. This finding is supported by Dewi et al. (5) and Witdiawati et al. (12) which shows the effectiveness of religion-based health education. Theoretically, this perception acts as an enabling factor in the PRECEDE-PROCEED Model, where the value of trust towards future generations encourages acceptance of interventions such as exclusive breastfeeding and posyandu visits, while strengthening synergies with government programs.

Sustainable strategies implemented by Islamic organizations in Stunting Prevention in Jember Regency in the 2025 Stunting Program

Stunting management strategy implemented by Islamic organization is multidimensional and contextual, with cultural-participatory approach by NU and institutional-structured by Muhammadiyah. This finding is in line with Handayani (13) regarding the effectiveness of the Fatayat NU and Nasyiatul Aisyiyah programs. In the perspective of empowerment theory, this strategy empowers communities through the value of ukhuwah Islamiyah and gotong royong, and supports specific and sensitive nutritional interventions as mandated in Presidential Regulation No. 72 of 2021 (14). This shows the flexibility of Islamic organizations as non-state actors who are able to bridge formal policies and social realities.

The Impact of the Implementation of Islamic Organization Strategy to Reduce Stunting in Jember

The implementation of Islamic organizational strategies has a significant impact on improving health literacy and changing people's behavior. The high support of religious leaders, the strength of organizational networks, and the motivation of members are the main factors for success, in line with Kustin (4) and Witdiawati et al.(12). The real impact is seen in the downward trend in the prevalence of stunting in Jember Regency, from 34.9% (2022) to around 29.7% (2023), to reach a range of 7-9% by mid-2024 based on data from the Local Health Office. This achievement supports the national target of reducing stunting by 18.8% in 2025 (15) and confirms the potential of a religion-based approach as a sustainable intervention model.

Factors supporting and inhibiting the success of Islamic organization strategies in efforts to overcome Stunting

The main supporting factors include the breadth of the organization's network, the legitimacy of religious leaders as opinion leaders, and the intrinsic motivation of members, which reflects the strong social capital of the community (4). In the Social Ecological Model, this factor functions at the interpersonal and community level. Conversely, limited funds, cadre knowledge capacity, and cultural resistance are the main obstacles, in line with the findings of Noviansyah et al.(16). In the perspective of empowerment, this condition confirms the importance of capacity building and diversification of resources, including religious philanthropy.

Efforts implemented by Islamic organizations for the sustainability of Stunting prevention programs until 2025

Sustainability efforts are made through the integration of stunting issues in organizational routines, relational-humanitarian approaches, and long-term collaboration. This strategy is in line with Wardani & Harumi (1) and strengthens the whole-of-society approach in the Social Ecological Model, with policy implications for the formal integration of Islamic organizations in the P3s 2025-2029 Stranas.

Recommendations of Islamic organizations in improving the effectiveness of prevention and control of Stunting in Jember

The main recommendations include strengthening contextual education based on Islamic values, increasing cadre capacity, cross-sector collaboration, as well as providing integrated data and sustainable funding. This recommendation is in line with the Health Belief Model, PRECEDE-PROCEED Model, as well as the findings of Wardani & Harumi (1) and Noviansyah et al.(16). Overall, this discussion confirms that Islamic organizations have a strategic role in accelerating the reduction of stunting through a value-based approach to Religion, Social Capital, and sustainable multisector collaboration, especially in Jember.

CONCLUSIONS

Based on the results of research and discussion, the conclusions of this study were prepared in accordance with the following problem formulation:

1. The level of understanding of Islamic organizations in Jember against stunting as a public health issue is in the very high category. Respondents demonstrated a good understanding of the definition, causes, long-term impact, and urgency of stunting prevention, both from a health and religious perspective.
2. Variations in perception among Islamic organizations in Jember related to the importance of stunting prevention is relatively small and tends to be uniform. Both NU and Muhammadiyah-based organizations place stunting prevention as a high priority, with emphasis on religious moral and social responsibility. Differences exist more in strategic emphasis (cultural vs. institutional) rather than fundamental perceptual differences.
3. Sustainable strategies implemented by Islamic organizations in stunting prevention in Jember Regency in the 2025 Stunting program are multidimensional and complementary. NU and its autonomous bodies (Muslimat NU, Fatayat NU) prioritize a community-based, cultural, and participatory approach through regular recitation, nutritional alms, home visits, and strengthening existing posyandu. Meanwhile, Muhammadiyah and its Ortom (‘Aisyiyah, LAZISMU) implemented a more structured, institutional, and formal health service-based

approach through charity efforts, nutritious food assistance, and promotive-preventive education. The sustainability of the strategy is maintained by integrating the issue of stunting into the routine activities of the organization as well as relational approaches to overcome community resistance.

4. The impact of the implementation of the Islamic organization strategy to reduce stunting rates in Jember proved significant. The prevalence of stunting decreased from 34.9% (2022) to 29.7% (2023) based on skiing and even reached 7.43% according to local e-PPGBM data in 2024. This impact is seen in increasing public awareness, posyandu participation, changes in patterns foster care and nutrition, as well as high collaboration with local governments (84.1% of respondents stated active collaboration).
5. Factors that support the success of the Islamic organization strategy include a wide network of organizations (97.3%), the role of religious leaders (96.7%), as well as the motivation of members (94.0%). While the main inhibiting factors are limited funds (79.6%), lack of knowledge of some members and volunteers (84.6%), as well as local culture/habits that make it difficult to socialize (82.9%).
6. The efforts of Islamic organizations in ensuring the sustainability of stunting prevention programs until 2025 are carried out through the integration of stunting issues into organizational routines (recitation, cadre activities), humanitarian approaches and personal dialogue to overcome community misconceptions, strengthening internal commitment based on mutual cooperation and sincerity, and long-term relational collaboration with puskesmas and village governments.
7. The recommendations of Islamic organizations in improving the effectiveness of stunting prevention and control in Jember Regency include: (a) contextual and value-based continuing education, (b) intensive assistance for at-risk families in plain language, (c) strengthening more formal cross-sector collaboration with local governments, (d) capacity building and appreciation of field cadres, and (e) providing integrated data and sustainable funding to support more equitable interventions.

Overall, Islamic organizations in Jember Regency have served as the government's strategic partner in accelerating the reduction of stunting through an effective and sustainable religious and community values-based approach. This contribution is one of the keys to the success of a significant reduction in local stunting rates and supporting the achievement of national targets in 2025.

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