

Mapping Socio-Cultural Factors and the Role of Traditional Institutions in Stunting Prevention through the Utilization of Secondary Data in West Aceh District

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Abstract

Stunting remains a complex and multidimensional public health problem in Indonesia, including in West Aceh District, where prevalence rates remain high despite various intervention programs. Socio-cultural factors, local wisdom, and the role of traditional institutions significantly influence community behavior toward stunting prevention. Utilizing secondary data provides a strategic approach to mapping the relationship between socio-cultural dimensions and the role of customary institutions, particularly within the local wisdom context of West Aceh, which is characterized by strong community-based and religious social systems. This study aims to map socio-cultural factors and the role of traditional institutions in stunting prevention in West Aceh District by utilizing secondary data from official sources. This research employed a descriptive–analytic design using secondary data obtained from the Indonesian Nutrition Status Survey (SSGI), Indonesian Health Survey (SKI), West Aceh District Health Office reports, and local government documents related to stunting reduction programs. The analysis applied the Health Belief Model (HBM) framework to assess perceived susceptibility, benefits, barriers, and social support influencing stunting prevention behaviors, combined with spatial and thematic analysis to map socio-cultural variations and community wisdom across villages. Findings revealed that socio-cultural factors such as meuseuraya (mutual cooperation), religious values, and local dietary practices positively contribute to stunting prevention behaviors. Traditional institutions, including tuha peut, keuchik, and imum meunasah, act as educational agents and social mobilizers that enhance public compliance with healthy living practices and healthcare utilization. Nevertheless, variations were observed among villages in terms of participation levels and institutional effectiveness, particularly in rural areas less exposed to formal interventions. Secondary data analysis provides a comprehensive understanding of the interrelations between socio-cultural factors and the role of traditional institutions in stunting prevention in West Aceh. Strengthening the integration of the Health Belief Model framework with local wisdom is crucial for developing culturally responsive, participatory, and sustainable policies to accelerate stunting reduction.

Keywords: stunting; local-wisdom; socio-cultural factors; secondary data

Introduction

Stunting remains one of the most complex public health challenges in Indonesia, as it is multidimensional and influenced by biomedical, environmental, economic, and sociocultural determinants. Despite extensive efforts by national and local governments, stunting prevalence in several regions continues to be concerning. West Aceh District is among the areas facing persistent challenges, where rates remain high even though both nutrition-specific and nutrition-sensitive interventions have been implemented over the past several years. In Aceh, the stunting problem is not only associated with limited access to health and nutrition services but is also deeply shaped by the sociocultural characteristics of the population¹.

Aceh is characterized by a community-based social structure, strong religious values, and longstanding local wisdom that have governed daily life and social relations for centuries. Elements such as *meuseuraya* (collective action), the influence of religious leaders, traditional dietary practices, and customary institutions (*tuha peut*, *keuchik*, *imum meunasah*) play a substantial role in shaping household health behaviors, including stunting prevention practices. The abstract's findings confirm that these sociocultural factors positively contribute to improving stunting prevention behaviors within communities. Within the broader context of health development, sociocultural analysis is crucial because behavioral change cannot be imposed solely through clinical or technical interventions².

Health interventions that overlook local cultural values often demonstrate limited effectiveness, particularly in rural areas where customary systems remain influential. Conversely, integrating public health initiatives with local wisdom can enhance community acceptance, compliance, and program sustainability. Customary institutions in Aceh have a significant role in shaping social norms and collective behavior. The abstract reports that *tuha peut*, *keuchik*, and *imum meunasah* function as educators and social mobilizers capable of promoting compliance with healthy living practices and encouraging the use of health services. However, the influence and effectiveness of these institutions are not uniform across all areas³.

Variations in community participation, exposure to formal interventions, and village-level social dynamics contribute to differences in stunting prevention outcomes across *gampong*. Understanding the complex relationships between sociocultural factors and the effectiveness of traditional institutions requires a systematic analytic approach. Secondary-data analysis thus becomes strategic, as it enables comprehensive assessment across multiple regions and provides insights that are broader than those derived from small-scale primary surveys. This study utilizes data from SSGI, SKI, district health office reports, and official government documents to map sociocultural factors and the roles of traditional institutions in West Aceh. The analysis is guided by the Health Belief Model (HBM) to evaluate perceived susceptibility, perceived benefits, perceived barriers, and social support associated with stunting prevention. This approach allows for an efficient, holistic understanding of community conditions⁴.

Acehnese society possesses distinctive sociocultural features, including a highly communal social structure, strong adherence to Islamic values, and functioning customary institutions. The tradition of *meuseuraya* (collective cooperation) reflects strong social solidarity and constitutes a form of social capital with significant potential to reinforce health programs. Customary institutions such as *tuha peut* (village customary council), *keuchik* (village head), and *imum meunasah* (village-level religious leader) play strategic roles in disseminating information, shaping behavioral norms, and mobilizing communities. In West Aceh, these institutions are not symbolic; their roles are embedded in everyday community life.

The *keuchik* and *tuha peut* hold social and political legitimacy necessary for mobilizing residents, whereas the *imum meunasah* has strong moral authority to convey health messages grounded in religious teachings. Nonetheless, the effectiveness of these institutions varies across regions⁵.

The indicates variations in community participation and institutional performance across *gampong*, particularly in remote inland areas with limited exposure to formal government interventions. Previous research further confirms that sociocultural factors are strong determinants of stunting reduction. Family values, caregiving practices, traditional dietary patterns, local child-health beliefs, and gender norms shape maternal and household behaviors related to complementary feeding, health service utilization, and responses to early signs of growth faltering. In certain areas, traditional beliefs regarding “hot” and “cold” foods may restrict dietary diversity among young children⁶.

In Aceh, strong religious norms can serve as opportunities for health education when messages are framed through Islamic perspectives; however, they may also pose challenges when religious interpretations are not accompanied by accurate scientific information. Therefore, detailed sociocultural mapping is essential for designing interventions that are contextually relevant, culturally acceptable, and effective. The roles of traditional institutions in stunting prevention become increasingly important given the complexity of contributing factors and the need for multisectoral approaches. The *keuchik* holds administrative authority to regulate and initiate village-based health programs. The *tuha peut* serves as a supervisory body that can endorse village regulations supporting health initiatives such as strengthening posyandu, mandating antenatal care, and monitoring risk behaviors affecting children. Meanwhile, the *imum meunasah* plays a crucial role as a moral and religious communicator, emphasizing the importance of protecting maternal and child health. Together, these institutions serve as agents of social change contributing to accelerated stunting reduction⁷.

These leaders function as educators and mobilizers who can enhance community compliance with healthy behaviors. One major challenge in understanding sociocultural determinants of stunting is the limitation of primary data collection, which often requires substantial financial resources, extensive time, and narrow population coverage. Thus, the use of secondary data becomes a strategic alternative, offering comprehensive and longitudinal insights into health, socioeconomic, and demographic conditions. Secondary data also facilitate spatial and thematic analyses to identify sociocultural variations across regions, as undertaken in this study. Such mapping can pinpoint geographic patterns of stunting, priority areas, and villages with relatively strong or weak customary institutions⁸.

In sum, research that maps sociocultural factors and examines the roles of traditional institutions in stunting prevention is essential for producing culturally responsive, participatory, and sustainable policy recommendations. Integrating the HBM framework with Acehnese local wisdom offers a promising strategy for accelerating stunting reduction in culturally strong settings such as West Aceh District.

Methods

This research utilizes a descriptive–analytic study design using secondary data drawn from multiple official sources⁹. The analysis integrates behavioral theory (Health Belief Model) with spatial and thematic mapping approaches to assess sociocultural variations across villages in West Aceh District. Data were obtained from: 1. Survei Status Gizi Indonesia (SSGI), district-level stunting prevalence, child anthropometry, nutrition indicators. 2. Survei Kesehatan Indonesia (SKI), maternal behavior, health service utilization, sanitation practices, breastfeeding, and complementary

feeding data. 3. West Aceh District Health Office Reports, annual stunting program achievements, posyandu activity records, and village-level health performance. 4. Local Government Planning Documents, including village development plans and stunting acceleration strategies. 5. Sociocultural documentation, qualitative descriptions of traditional institutions and community structures.

Analytical Framework this research is: 1. Health Belief Model (HBM) Integration. HBM components assessed include: a. Perceived, b. susceptibility to stunting, c. Perceived severity, d. Perceived benefits of preventive practices, e. Perceived barriers, f. Cues to action (role of traditional leaders, religious leaders, community meetings, g. Social support (e.g., *meuseuraya*). 2. Spatial and Thematic Mapping. Village-level sociocultural characteristics were compared using: 1. Stunting prevalence clusters, 2. Institutional engagement indices, 3. Community participation scores, 4. Health service utilization patterns.

Data Analysis: Quantitative indicators were summarized descriptively, sociocultural variables were synthesized into thematic categories, tables summarize key indicators (placeholders provided below), HBM constructs were analyzed qualitatively to align sociocultural findings with behavioral determinants. Ethical Considerations, since the study utilized publicly available secondary data, no formal ethical approval was required. However, ethical principles related to confidentiality, transparency, and data integrity were upheld¹⁰.

Results

1. Stunting Prevalence Overview

Table 1. Stunting Prevalence in West Aceh District (SSGI 2023)

Kecamatan	Prevalensi Stunting (%)	Catatan Kontekstual
Johan Pahlawan	28.5	Urban, high service access
Meureubo	31.2	Urban–rural transition
Kaway XVI	37.8	strong customary traditions
Woyla	40.1	ural areas with strong customary mobilization
Arongan Lambalek	42.3	low service access

Source: SSGI 2023

The Table 1. presents stunting prevalence across subdistricts (*kecamatan*) in West Aceh District and highlights contextual characteristics that may influence variation in child growth outcomes. Lower stunting prevalence is observed in more urbanized areas, such as Johan Pahlawan, where access to health services and infrastructure is relatively higher. In contrast, subdistricts with predominantly rural characteristics, including Woyla and Arongan Lambalek, exhibit higher stunting prevalence, which is associated with limited service access and geographical constraints. Subdistricts such as Kaway XVI and Woyla demonstrate strong customary traditions and community mobilization, indicating that sociocultural structures remain influential in shaping health behaviors. These findings suggest that stunting prevalence is not solely determined by service availability but is also closely linked to sociocultural contexts, reinforcing the need for location-specific and culturally informed stunting prevention strategies.

Sociocultural Determinant

Positive Sociocultural Contributors: *Meuseuraya* strengthens community mobilization, Religious values support adherence to health guidelines and Local food practices enhance dietary diversity in some villages. Negative or Limiting Factors: Food taboos affecting pregnant women, Gender norms limiting maternal decision-making and Limited exposure to formal health messaging in rural villages¹¹.

Table 2. Secondary Data Sources and Sociocultural Variables Analyzed

Data Source	Level of Data	Key Variables Extracted	Relevance to HBM	Analytical Use
SSGI 2023	District, Subdistrict	Stunting prevalence, child anthropometry	Perceived severity	Spatial clustering
SKI 2022	Household	ANC visits, breastfeeding, sanitation	Perceived benefits and barriers	Behavioral mapping
District Health Office Reports	Village	Posyandu activity, program coverage	Cues to action	Institutional performance
Village Planning Documents	Village	Customary regulations, community participation	Social support	Thematic analysis
Sociocultural Records	Community	Meuseuraya, adat roles, religious influence	All HBM constructs	Contextual interpretation

Table 2. Summarizes the secondary data sources utilized in this study and the corresponding sociocultural and health-related variables extracted for analysis. Each data source contributes complementary information across different administrative levels, enabling a comprehensive mapping of stunting prevention determinants in West Aceh District. National surveys (SSGI and SKI) provide standardized quantitative indicators related to child nutrition, maternal behavior, and health service utilization, which inform the assessment of perceived severity, benefits, and barriers within the Health Belief Model (HBM) framework. District health office reports and village planning documents capture institutional performance, community participation, and local policy contexts, which function as cues to action and social support mechanisms. Sociocultural documentation enriches the analysis by contextualizing behavioral patterns within local wisdom, customary institutions, and religious practices. The integration of these multiple secondary data sources enhances analytical depth, strengthens triangulation, and supports a culturally grounded interpretation of stunting prevention behaviors.

Table 3. Sociocultural Factors and Their Implications for Stunting Prevention

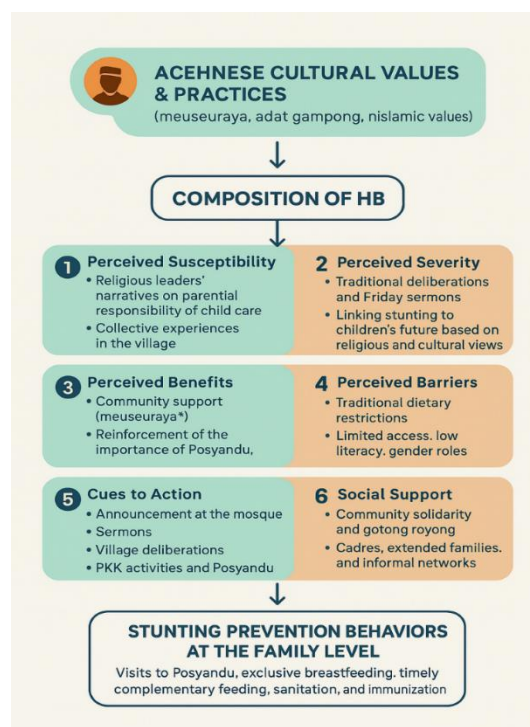
Sociocultural Factor Manifestation at Village Level		Influence on Behavior	Expected Health Outcome
Meuseuraya	Gotong royong posyandu	Increased participation	Improved growth monitoring
Religious values	Sermons on child care	Higher perceived severity	Early care-seeking

Sociocultural Factor Manifestation at Village Level		Influence on Behavior	Expected Health Outcome
Dietary traditions	Local food utilization	Improved dietary diversity	Better child nutrition
Food taboos	Restriction during pregnancy	Reduced protein intake	Higher stunting risk
Gender norms	Limited maternal autonomy	Delayed decision-making	Lower service utilization

Table 3. Illustrates the key sociocultural factors identified at the village level and their implications for stunting prevention behaviors. The table demonstrates how local cultural practices, social norms, and community structures influence household decision-making related to child nutrition and health. Positive sociocultural factors—such as *meuseuraya* (collective cooperation), strong religious values, and supportive local dietary practices—function as facilitators that enhance community participation, reinforce healthy behaviors, and improve access to health services. Conversely, limiting factors, including food taboos, restrictive gender norms, and unequal decision-making power, act as sociocultural barriers that may reduce dietary diversity, delay care-seeking, and weaken preventive efforts. By linking sociocultural conditions to expected health outcomes, this table highlights the dual role of culture as both an enabling and constraining force, emphasizing the importance of culturally responsive strategies in accelerating stunting prevention.

3. Role of Traditional Institutions

Institutional Roles Identified: **Keuchik:** regulatory enforcement, community coordination, **Tuha Peut:** supervisory function, community deliberations, **Imum Meunasah:** religious sermons promoting health behaviors¹²



Picture 1. Composition of HBM

A village-level institutional participation index can be summarized (placeholder):

Table 4. Traditional Institution Engagement Index

Village	Keuchik	Tuha	Peut Imum	Meunasah	Overall Engagement
Village A	High	Medium	High		High
Village B	Medium	Low	Medium		Medium
Village C	Low	Low	High		Medium

4. Variations Across Villages

The significant variation in effectiveness across villages, particularly rural ones. Findings: Highly engaged villages show better posyandu attendance, remote villages show lower institutional coordination, health information exposure correlates strongly with leader involvement .

5. Integration of HBM Findings

HBM-guided analysis revealed: Perceived susceptibility increases when *imam meunasah* emphasizes religious duty to protect children, perceived benefits rise when *keuchik* links health practices to community welfare, barriers include cultural beliefs about foods, economic conditions, and low literacy, cues to action: village meetings, sermons, women's group activities, social support: *meuseuraya* significantly enhances shared childcare practices.

Table 5. Village-Level Sociocultural Indicators in West Aceh District

Village	Level of <i>Meuseuraya</i>	Support from Religious Leaders	Level of Social Solidarity	Qualitative Notes
Village A	High	Strong	High	Rapid mobilization during posyandu activities
Village B	Moderate	Moderate	Moderate	Support from religious leaders is inconsistent
Village C	Low	Low	Low	Customary activities are rarely conducted
Village D	High	Strong	High	<i>Gotong royong</i> traditions are highly active
Village E	Moderate	Strong	Moderate	Religious leaders serve as the primary mobilizers

Table 5. Matrix of Local Wisdom Integration and the Health Belief Model for Accelerating Stunting Prevention

HBM Component	Local Wisdom / Customary Elements	Integrated Mechanisms	Implications for Stunting Prevention
Perceived Susceptibility	Religious teachings, community elders' advice	Risk framing delivered through sermons, adat meetings, and storytelling	Increases parental awareness of child vulnerability to growth faltering
Perceived Severity	Moral–religious norms, communal responsibility (<i>meuseuraya</i>)	Linking childhood stunting with future wellbeing, educational success, and family honor	Enhances seriousness toward early growth monitoring and timely health service use
Perceived Benefits	Support from <i>keuchik</i> , <i>tuha peut</i> , <i>imam meunasah</i>	Leaders endorse posyandu, ANC, MP-ASI, and hygiene practices	Strengthens acceptance and value of health interventions
Perceived Barriers	Food taboos, gender norms, limited autonomy of mothers	Leaders clarify misconceptions; women's groups (PKK) provide peer support	Reduces cultural barriers to recommended feeding and caregiving practices
Cues to Action	Mosque announcements, adat rituals, communal events	Direct mobilization through weekly prayers, village meetings, and gotong royong	Improves attendance at posyandu and community health campaigns
Self-Efficacy	Social support networks, <i>meuseuraya</i> solidarity	Practical demonstrations, mentoring by kader, joint food preparation	Increases maternal confidence in adopting healthy feeding and hygiene behaviors

The findings of this study provide a comprehensive understanding of how sociocultural factors and the roles of traditional institutions interact in shaping stunting prevention behaviors in West Aceh District. Through secondary data analysis and the integration of the Health Belief Model (HBM) framework, this research demonstrates that stunting cannot be understood solely through biomedical or economic perspectives, but must be viewed as a social phenomenon influenced by deeply rooted values, norms, local power structures, and cultural practices. This discussion integrates the research findings, health behavior theory, and global literature to highlight the practical implications for public health policy¹³.

Discussion

Sociocultural Context as a Determinant of Stunting Prevention Behavior

Sociocultural determinants play a decisive and multidimensional role in shaping stunting-related behaviors within households and communities. In Aceh Barat, these determinants are embedded in longstanding traditions, religious values, gender norms, and community governance systems that influence how families understand, prioritize, and act upon child health and nutrition. This study confirms that sociocultural factors do not merely act as background variables; rather, they directly structure the cognitive and behavioral processes described in the Health Belief Model (HBM), thereby influencing every stage of decision-making related to stunting prevention¹⁴.

a. Cultural Norms as Behavioral Regulators

Cultural norms guide daily practices related to pregnancy, childcare, feeding, hygiene, and family decision-making. In Aceh, traditions such as *meuseuraya* (collective work), *peumulia jamee* (respecting guests), and customary food practices influence both available food options and how caregiving responsibilities are shared. These norms can serve as facilitators of positive health behavior when aligned with evidence-based practices. For example, *meuseuraya* strengthens community cooperation, making it easier to organize posyandu activities, mobilize families, and disseminate health information. However, cultural norms can also act as barriers. Dietary taboos (*pantangan makanan*), such as avoiding eggs or certain fish during pregnancy or early complementary feeding, can reduce dietary diversity and protein intake, especially in vulnerable households. Such socio-cultural barriers often override biomedical advice, particularly when reinforced by older family members or community lore¹⁴.

b. Religious Values as Drivers of Perception and Motivation

Religious interpretation greatly influences how families perceive child health. In Aceh Barat, where Islamic teachings strongly inform community life, religious leaders (*imam meunasah*) are among the most trusted sources of guidance. When religious sermons highlight parental responsibility as a moral and spiritual obligation, families demonstrate higher awareness of stunting risks. This finding demonstrates the direct influence of religious cues on the perceived susceptibility and perceived severity dimensions of HBM¹⁵. Conversely, if religious messages do not explicitly integrate child-health narratives, families may not recognize stunting as a threat requiring urgent action. This underscores the need for culturally embedded health communication strategies that leverage religious spaces as platforms for reinforcing healthy behaviors.

c. Traditional Leadership and Collective Action

Traditional institutions such as *keuchik*, *tuha peut*, and *imam meunasah* act as key socio-political actors who legitimize decisions and mobilize communities. Their involvement significantly affects cues to action within the HBM framework. When these leaders actively support posyandu, sanitation drives, or nutritional campaigns, participation levels rise substantially. Conversely, villages where traditional leaders are passive or disengaged tend to exhibit weaker community adherence to health programs. This finding aligns with global evidence that community trust in traditional authority figures is a major determinant of health-seeking behavior in rural populations (Akamike et al., 2021). In Aceh, the authority of these local institutions is historically rooted, making them especially influential in shaping behavioral norms related to maternal and child health¹⁶.

d. Gender Norms and Decision-Making Power

Gender roles within Acehnese households influence feeding practices, health service use, and division of caretaking responsibilities. While Aceh is known for strong female leadership in some historical contexts, daily household dynamics often reflect a patriarchal decision-making model. Limited autonomy of mothers in determining health-related choices — such as what food to buy, when to seek care, and how often to attend posyandu — can hinder stunting prevention. These gender norms manifest as perceived barriers in the HBM model, particularly when women lack control over household resources or mobility. Effective interventions must therefore address not only information gaps but the gendered power structures that shape family behavior¹⁷.

e. Social Capital and Community Cohesion

Strong social capital — characterized by trust, reciprocity, mutual aid, and shared responsibility — amplifies the success of stunting interventions. In Aceh Barat, the collective nature of gampong (village) life means that health behaviors are not purely individual decisions but embedded in community expectations and mutual monitoring. Households that receive consistent social support from neighbors, extended family members, and community organizations demonstrate higher adherence to recommended behaviors such as exclusive breastfeeding and timely complementary feeding. Social support strengthens the self-efficacy and perceived benefits components of HBM by creating an enabling environment where positive behaviors are normalized and reinforced¹⁸.

f. Sociocultural Determinants as a Double-Edged Sword

The findings indicate that sociocultural determinants can both support and hinder stunting prevention: Facilitators: Community cooperation (*meuseuraya*), Collective childcare practices, Religious justification for health behaviors, Strong social networks and High trust in local leaders. Barriers: Pantangan makanan (dietary taboos), Misinformation passed down generationally, Gender-based decision limitations, Cultural acceptance of child shortness as “normal” and Limited literacy coupled with strong reliance on traditional wisdom. Understanding these dual functions allows policymakers to design culturally adaptive strategies that amplify the facilitators while mitigating the barriers¹⁹.

g. Implications for Policy and Intervention Design

Recognizing that sociocultural determinants shape stunting behaviors has several important implications: 1. Health messages must be culturally grounded, using local language, storytelling, and religious framing. 2. Traditional leaders should be formally integrated as partners in health program implementation. 3. Community rituals and social events can serve as sustainable platforms for health promotion. 4. Gender-sensitive interventions are essential to strengthen maternal decision-making power. 5. Behavior-change models like HBM must be localized, incorporating the cultural logic of Acehnese communities²⁰.

This perspective moves beyond a biomedical model toward a holistic view of stunting as a socially constructed and culturally mediated phenomenon. The analysis indicates that sociocultural factors such as *meuseuraya*, religious values, and local dietary patterns contribute positively to stunting prevention behaviors. These findings are consistent with several studies emphasizing the importance of social capital in supporting public health. Harpham (2008) and Kawachi et al. (2010) assert that communities with high levels of social cohesion possess strong collective mechanisms to promote healthy behaviors, monitor one another, and ensure adherence to social norms that support child health. In the Acehnese context, *meuseuraya* is not merely a form of communal labor but also a symbol of social solidarity that facilitates community mobilization for posyandu activities, environmental sanitation, health education, and the provision of support to vulnerable families. This reinforces the findings presented in the abstract, which show how this cultural practice enhances participation in stunting prevention initiatives²¹.

On the other hand, certain cultural factors may act as barriers. For instance, traditional beliefs regarding “taboo foods” for pregnant women or young children can limit the consumption of nutritious, diverse foods. Similar studies in East Nusa Tenggara (Pujiati et al., 2022) and West Sumatra (Putra et al., 2020) found that food taboos contributed to low intake of animal-source protein. Within the HBM framework, these traditional beliefs function as perceived barriers that reduce the likelihood of adopting healthy nutrition behaviors, even when appropriate knowledge is provided. Overall, the findings illustrate that Aceh’s sociocultural context is neither solely a facilitator nor an obstacle—rather, it

represents a complex value system that can be leveraged to strengthen stunting prevention programs when approached sensitively and strategically²².

2. The Role of Traditional Institutions as Health Mobilizers

Traditional institutions have long been central pillars of social organization in Aceh, shaping community decision-making, conflict resolution, cultural preservation, and collective actions. In the context of public health, particularly in stunting prevention, these institutions hold strategic influence because of their cultural legitimacy, social embeddedness, and moral authority. This study reinforces findings from the abstract that traditional actors—*keuchik*, *tuha peut*, and *imam meunasah*—function as crucial mobilizers of health behaviors in Aceh Barat. Their roles extend beyond administrative duties and permeate deep into behavioral guidance, opinion formation, and community compliance with health recommendations²³.

3. Traditional Institutions as Anchors of Social Legitimacy

Traditional institutions in Aceh derive their influence from centuries of customary governance (*adat*), Islamic law, and communal trust. Unlike modern bureaucratic structures, these institutions command legitimacy based on lineage, local wisdom (*hikmah*), and religious authority. Because legitimacy is culturally rooted, messages delivered by traditional leaders are more readily accepted and internalized than health information from external actors such as government officials or NGOs.

This cultural legitimacy is especially critical in mobilizing households toward healthy practices such as posyandu attendance, antenatal care, sanitation improvements, and appropriate complementary feeding. When a *keuchik* or *imam meunasah* speaks about stunting, the message is not perceived as an external directive; it becomes a shared community concern. This aligns with global evidence showing that trust in local institutions significantly predicts uptake of health interventions²³.

4. Role of *Keuchik* in Coordination and Policy Enforcement

As the village leader, the *keuchik* oversees village governance, including planning, budgeting, and community mobilization. In Aceh Barat, the *keuchik* is responsible for coordinating village stunting reduction teams, endorsing posyandu activities, and ensuring community participation in health programs. The abstract confirms that *keuchik* serves as a regulatory and mobilization agent in stunting prevention. The *keuchik's* involvement is vital in: issuing village-level regulations supporting maternal and child health, mandating attendance at community health sessions, allocating village funds for sanitation, nutrition, and posyandu, mediating discussions between families and health workers. When *keuchik* actively participates, village-level health programs tend to achieve higher coverage. Conversely, passive leadership often results in weaker mobilization, inconsistent attendance, and lack of community ownership²⁴.

5. *Tuha Peut* as Cultural Supervisors and Community Deliberation Leaders

The *tuha peut* (village consultative council) acts as a supervisory institution ensuring that village policies align with cultural and communal values. As highlighted in the abstract, *tuha peut* contributes to monitoring and reinforcing community decisions related to health. Their role in health mobilization includes: overseeing the implementation of health-related village regulations, ensuring transparency of village health funds, endorsing collective actions related to sanitation and nutrition and mediating conflicts between community members and health workers. Because *tuha peut* represents community elders and respected figures, their support legitimizes health initiatives and improves compliance.

When *tuha peut* members participate in musyawarah gampong (village deliberations), health programs are viewed not as external interventions but as community-agreed obligations²⁴.

6. *Imum Meunasah* as Moral and Religious Mobilizers

Among all traditional institutions, *imum meunasah* may have the most direct influence on health behaviors, particularly in shaping perceived susceptibility, perceived severity, and cues to action within the Health Belief Model (HBM). The abstract indicates that *imum meunasah* serves as an educator and motivator in adopting healthy practices. Religious leaders influence families through: Friday sermons (khutbah) addressing child health, religious classes linking cleanliness, nutrition, and Islamic values, moral framing of parental responsibility for child welfare and reinforcing the dangers of neglecting early childhood care. When *imam meunasah* embeds nutrition messaging into religious teachings, it elevates stunting from a technical issue to a moral obligation. This dramatically increases attention and compliance, especially among older generations who may otherwise adhere to traditional practices conflicting with modern health recommendations²⁵.

7. Traditional Institutions as “Cues to Action” in HBM

HBM posits that health behavior is influenced by triggers that prompt individuals to take action. In Aceh Barat, traditional institutions serve as powerful cues to action: Community announcements from the mosque after prayer times, Invitations to participate in *meuseuraya* and health cleaning days, Endorsements during *kenduri*, weddings, and community gatherings and Mobilization through the *meunasah* network. These cues are more frequent, culturally embedded, and trusted than formal health system reminders. As a result, households are more likely to attend *posyandu* or participate in sanitation campaigns when reminders come from familiar cultural and religious structures²⁵.

8. Bridging Formal Health Systems and Local Culture

A critical finding of the study is that traditional institutions operate as intermediaries connecting formal health recommendations with local cultural interpretations. This bridging function is crucial in communities where biomedical knowledge may clash with cultural norms or where technical language is difficult to understand. Traditional leaders help: reinterpret health messages using local metaphors and values, negotiate acceptance of new practices (e.g., dietary changes), advocate for compliance even when interventions require behavior change and reduce distrust toward external health workers. This aligns with global research showing that interventions succeed when embedded within local cultural structures²⁶.

9. Addressing Sociocultural Barriers Through Traditional Institutions

Some sociocultural barriers—such as food taboos, gender norms, or fatalistic beliefs—cannot be overcome solely through medical counseling. Traditional institutions help reinterpret these beliefs, gradually shifting community norms. Examples include: *Imum meunasah* clarifying that eggs or fish are not harmful for pregnant women, *Keuchik* challenging gender norms that limit mothers’ mobility, *Tuha peut* encouraging collective monitoring of child nutrition and Village elders correcting misconceptions about “short children being normal”. This process transforms local cultural logics to become more aligned with modern health recommendations²⁶.

10. Village-Level Variations in Institutional Effectiveness

The abstract notes that not all villages show equal effectiveness; some rural areas have weaker institutional engagement. Such variation often stems from: differences in leadership charisma, levels of religious engagement,

exposure to government programs, socioeconomic disparities and internal political dynamics. Understanding these differences is essential for designing tailored interventions rather than one-size-fits-all policies²⁷.

11. Differential interventions across villages

Villages with weak traditional leadership need higher involvement from puskesmas.

This is a significant finding because most national health policies remain focused on formal health workers, while the roles of local leadership structures are often insufficiently explored in a systematic manner. In Acehese communities, the social and moral legitimacy of customary and religious leaders is frequently stronger than that of health personnel, particularly in remote villages. Global literature shows a similar pattern: studies in Uganda and Nigeria (Akamike et al., 2021; Adamu et al., 2018) found that the direct involvement of religious leaders increased compliance with immunization and nutrition programs. Within the HBM framework, these institutions function as *cues to action*—health-behavior triggers that enhance risk awareness (perceived susceptibility) and urgency (perceived severity) related to stunting²⁸.

Beyond their educational role, these leaders also perform regulatory functions. The *keuchik* can establish local rules regarding mandatory posyandu visits, environmental hygiene practices, and the monitoring of high-risk pregnant women. The *tuha peut* can reinforce the legitimacy of these policies through village deliberation processes. The findings of this study confirm the effectiveness of these institutions, while also highlighting variations across villages—particularly between those with strong institutional engagement and those with weak governance structures. These variations indicate that stunting-reduction programs cannot rely on a homogeneous approach. Villages with strong institutional capacity can be given greater authority through community-driven strategies, whereas villages with weaker institutional structures require more intensive support from the puskesmas and local government²⁹.

Culturally-based social support in Aceh is very strong. *Meuseuraya* and *gampong* solidarity enhance the effectiveness of interventions because the community feels a collective responsibility towards the children in their neighborhood. The Health Belief Model (HBM) provides a robust theoretical lens that effectively integrates behavioral determinants with deeply embedded sociocultural influences, making it particularly relevant for stunting research in settings like Aceh Barat. As stunting is not merely a biomedical issue but a socially constructed phenomenon shaped by cultural norms, religious values, family systems, and community structures, models that account for these layered factors are needed. This study reaffirms that HBM is not only useful for predicting individual health behaviors but also highly adaptable for explaining how sociocultural forces shape maternal and child nutrition practices³⁰.

Conclusion

Stunting in West Aceh is not just a nutritional issue, but a cultural, social, and institutional phenomenon. Interventions that do not consider the Acehese cultural context and the role of traditional leaders have the potential to be less effective. Integrating the HBM with Acehese cultural values provides a strong foundation for developing a stunting prevention strategy that is more responsive, participatory, and sustainable.

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