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Educational Model of Stunting Prevention Increases Awareness as a Result of the Development of the Integrated Eight Actions: SEM Analysis

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ABSTRACT: This study examines how Educational Model of Stunting Prevention Increases Awareness as a Result of the Development of the Integrated Eight Actions. The aim is to identify Integrated Eight Action Development Model in Stunting Prevention by Raising Awareness. Methodologically, this paper adopted an observational study approach, referring to the Eight Integrated Actions Model, which was used to assess the awareness of patient families and communities in stunting prevention. Data were collected using a Likert-scale assessment instrument and reviewed to determine its usefulness in standardizing documentation of the Eight Integrated Actions elements. Analysis with SEM-PLS (Structural Equation Modeling-Partial Least Squares) The findings confirmed that all Integrated Eight Actions Model-based Prevention dimensions such as Situation Analysis ($\beta = 0.572$; $p = 0.042$ vs. $p<0.05$), Activity plan ($\beta = 0.659$; $p = 0.041$ vs. $p<0.05$), Stunting discussion forum ($\beta = 0.729$; $p = 0.031$ vs. $p<0.05$), Regent/Mayor regulation on the role of village ($\beta = 0.570$; $p = 0.012$ vs. $p<0.05$), Coaching ($\beta = 0.769$; $p = 0.044$ vs. $p<0.05$), Data management system ($\beta = 0.669$; $p = 0.023$ vs. $p<0.05$), Stunting measurement and Publication ($\beta = 0.689$; $p = 0.017$ vs. $p<0.05$), to Performance review ($\beta = 0.709$; $p = 0.016$ vs. $p<0.05$) statistically contributed positively to the outcome. The study concludes convincingly proves that the Integrated Eight Actions Model-based Prevention produces a significant correlation in increasing patient and community awareness, simultaneously.

Keywords: educational; stunting; prevention; awareness; integrated eight actions, SEM-PLS.

I. INTRODUCTION

The stunting prevention education model based on Integrated Eight Actions (IEA) has become a developing approach in modern stunting prevention. The IEA Concept refers to the prevention of stunting at the current moment in an intensive and comprehensive manner [1]. Whereas in previous stunting prevention models such as the ERKADUTA (RT Kawal Baduta) Model to improve knowledge, attitudes, and practices of stunting prevention in mothers with children under two years old, this was only based on mothers and only intrapersonal [2]. Stunting is a condition of growth failure in children under five years of age due to chronic malnutrition, especially in the first 1,000 days of life [3]. The Eight Actions Integration Education Model in Stunting prevention aims to raise awareness of patient families and the community with a coordinated, comprehensive, and collaborative intervention approach [4]. The institution responsible for implementing these actions must involve collaboration between patient families and the community in planning, implementing, and monitoring activities. A special team appointed by the Regent/Mayor is tasked

with ensuring the effective implementation of all integrated actions involving patient families and the community, as necessary efforts to reduce stunting at the district/city level down to the village level [5]. In the context of prevention and promotion, public health is not only beneficial for the families of patients with physiological and developmental disorders, but also for the community and health workers who face the burden every day in preventing stunting while breaking the chain of child growth and development disorders [6].

The Integrated Eight Actions Model based stunting prevention education model provides a significant link to stunting prevention by increasing awareness of stunting prevention, increasing awareness of patient families and communities who often experience difficulties in organizing coordination, comprehensiveness, and collaboration with cross-sectoral [7]. With the implementation of prevention based on the Integrated Eight Actions Education Model, patient families and communities are invited to be aware of identifying the availability of programs related to stunting prevention by understanding field conditions. Interventions can be focused on areas with high stunting prevalence, ensuring mothers receive education about the importance of exclusive breastfeeding and childcare practices [8]. Improving the implementation of prevention based on Integrated Eight Actions fosters systematic mind awareness, helps patient families and communities strengthen emotional regulation and reduce maladaptive actions [9]. Research shows that this type of intervention is able to increase patient and community awareness in stunting prevention [10].

Another correlation of the integration of the Implementation of the Integrated Eight Actions-based Prevention Education Model in Public Health in the form of prevention and health promotion is seen from the increase in patient and community awareness to participate in stunting prevention and actively participate in child nutrition programs, assessing child growth and development indicators [11]. Awareness will be formed with Joint Movements in the community because of a sense of being more emotionally present, having higher empathy, and being able to manage personal psychology better [12]. The quality of the Implementation of Integrated Eight Actions-based prevention can be created from the awareness of the patient's family and the community in stunting prevention that is oriented towards the patient's family and the community as an important component in supporting the process of stunting Prevention [13]. Within the framework of the Prevention model, the involvement of the patient's family and the community creates awareness of prevention and explores feelings without fear or being judged. This approach has been proven effective in increasing trust and opening up more open and meaningful two-way communication [14]. The Integrated Eight Actions-based stunting prevention education model in Public Health, as a form of prevention and health promotion, is seen from the increased awareness of patient families and the community. This model provides space for self-reflection, increased awareness of personal and professional boundaries, and the ability to recognize and identify coordinated, comprehensive, and collaborative intervention approaches early on [15]. The results of other studies conducted show an increase in awareness of patient families and the social community in stunting prevention [16].

II. RELATED WORK

The effectiveness of the integrated eight actions model-based stunting prevention education model is also inseparable from the system and organizational support. The implementation of the integrated eight actions model-based stunting prevention program in health care institutions needs to be accompanied by supporting policies, ongoing training, and the creation of a culture of patient and community awareness in prevention [17]. Working groups in supporting public health services, the success of prevention implementation, depends not only on individual capacity, but also on the seriousness of the organization in making it part of a comprehensive prevention system [18]. The positive results of the integrated eight actions model-based stunting prevention in the community can be seen through the psychosocial dimension. These changes are correlated with the individual's ability to manage stress, reduce reactivity to negative stimuli, and increase cognitive flexibility in prevention implementation [19].

Stunting prevention based on the integrated eight actions model also plays a role in reducing internalized stigma in patient families and the community by raising awareness in stunting prevention. Through the integrated eight actions model approach, awareness can be raised among patient families and the

community, encouraged to increase efforts for early identification and accept their condition without blame [20]. This correlates with increased self-esteem and motivation to raise awareness of stunting prevention [21]. When patient families and the community also apply the same principles, a more inclusive, open environment is created, and free from prejudice or blame for existing conditions. The integrated eight actions model in a service culture can create a strong social support system, which accelerates the psychosocial recovery process, especially in prevention [22]. The integrated eight actions model also increases awareness in ethical decision-making. Patients and the public have a higher tendency to calmly recognize moral dilemmas and consider various perspectives before taking action [23]. This is important in the context of prevention, which often involves difficult decisions regarding the rights of the patient's family, safety, and the balance between individual freedom and compliance with the prevention measures carried out. The integrated eight actions model helps the patient's family and the public act not only based on technical rules, but also from an inner space full of awareness and professional responsibility [24].

The development of the integrated eight actions model requires a systematic and evidence-based educational approach. An effective training and education curriculum includes a theoretical understanding of prevention based on the integrated eight actions model and mentoring by experienced facilitators [25]. Evaluation of program success can be done by measuring psychological indicators such as work stress, anxiety, awareness and life satisfaction, as well as clinical performance indicators such as documentation quality, inter-team communication, and compliance with stunting prevention standards as described in the situation analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of village, Coaching, Data management system, Stunting measurement and Publication, performance review. Positive evaluation results will be the basis for strengthening policies and expanding the program to other service units [26]. The integrated eight actions model also creates opportunities for cross-disciplinary collaboration between nurses, psychologists, psychiatrists, and occupational therapists. This interdisciplinary approach allows each profession to contribute to coaching according to its competencies, based on the principle of awareness. This strengthens team unity in assisting the implementation of stunting prevention based on the Integrated Eight Actions Model and complements each other. Awareness becomes a shared language that connects healing efforts within a biopsychosocial-spiritual framework [27]. In the long term, the integrated eight actions model not only increases awareness but also forms a more reflective, self-aware, and resilient pattern of thinking, identity, and responsibility of the patient's family and community in preventing stunting that is oriented and reflects the transformation of values from merely being a physiological and psychological healer to a recovery companion who is fully present for the patient, the patient's family, and the community [28]. In the midst of the dynamics of global health challenges, this approach brings awareness to the patient's family and the community regarding a more integrated, sustainable, and meaningful stunting prevention system for all parties involved [29].

This study aims to analyze in depth the relationship between the integrated eight actions model and patient and community awareness. The main focus is directed at how the Integrated Eight Actions Model can increase awareness of patient families and the community regarding stunting prevention and strengthen structured thinking patterns and therapeutic relationships. In addition, this study also aims to identify forms of situation analysis, activity plans, stunting discussion forums, Regent/Mayor regulation on the role of villages, coaching, data management systems, stunting measurement and publication, and performance reviews that can be implemented sustainably in families, communities, and health services. By mapping the relationship between the Integrated Eight Actions Model and indicators of psychosocial well-being, this study is expected to provide theoretical and practical contributions in the development of a more humanistic and evidence-based prevention model.

III. MATERIAL AND METHOD

1. DATA COLLECTION

This study uses a primary data model obtained from questionnaires distributed to respondents. A questionnaire is a data collection technique carried out by providing a series of written questions to

respondents to answer. The questionnaire was created in the form of a Google Form. Researchers distributed questionnaires to respondents to the families of patients taken based on 26 stunting cases and the community taken as a sample of the West Aceh Regency area. A brief explanation of the format and types of questions used in the Google Form can add to the understanding of how to collect data. The format used in this questionnaire includes closed questions with a Likert scale, multiple-choice questions, and open questions. The use of these types of questions allows researchers to collect quantitative data.

Before the questionnaire was distributed, validity and reliability tests were conducted to ensure the validity and consistency of the measurement tool. Validity was tested through factor analysis and construct validity, while reliability was tested using the Cronbach's Alpha test. This questionnaire had been pre-tested in a preliminary study to ensure its reliability and suitability for this research context. Furthermore, specific criteria were used to ensure accurate representation in the selection of West Aceh Regency. These criteria included categorizing community health centers based on type, geographic location, and number of patients. The selection of West Aceh Regency influences the generalizability of the research results, because the research results are more relevant to communities with similar characteristics, including Ujong Dua Belas Village, Aceh Besar, which has a high risk of stunting. This consideration should be taken into account when drawing broader conclusions from the results of this study. This study uses instruments from the results of the development of prevention based on the Integrated Eight Actions Model, which includes closed questions with a Likert scale. Questionnaire items were developed and linked to the constructs of situation analysis, activity plan, stunting discussion forum, regent/mayor regulation on the role of village, coaching, data management system, stunting measurement, and publication, performance review so that they can be used to interpret the constructs. Data was collected using instruments, which were measured with score provisions if: 1 = strongly disagree, 2= disagree, 3 = Neither agree nor disagree, 4= agree, 5 = strongly disagree. Approximately 95% accuracy, sensitivity, and specificity were obtained via criterion-related validity testing. Measures of demographic variables such as Age, Education, and Employment. Meanwhile, prevention is based on the Integrated Eight Actions Model, like situation analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of village, Coaching, Data management system, Stunting measurement, and Publication, performance review were shown to have discriminant validity. A single-factor unidimensional model with a factor score of 0.953 was shown to have structural validity. Both inter rater reliability (Krippendorff's alpha = 0.871) and internal consistency (Cronbach's alpha = 0.831; Spearman-Brown coefficient = 0.915; Guttman split-half coefficient = 0.928) showed excellent findings

2. RESEARCH DESIGN

This study used an observational study design. Sampling was conducted using area or cluster sampling techniques, which randomize groups, not individual subjects. In selecting respondents, there are inclusion and exclusion criteria applied. Inclusion criteria include the number of patients who match the characteristics of the study, while exclusion criteria include patients' families and communities that do not meet the minimum standards. Similarly, respondents were selected based on inclusion criteria such as age, gender, and education level, while exclusion criteria were applied to respondents who did not meet these criteria [30]. Cluster sampling techniques that include stunting cases are used to determine samples if the object to be studied or the data source is very broad, for example, the population of a country, province, or district. To determine which population will be used as a data source, samples are taken based on predetermined population areas [31]. The number of patient families was taken based on 26 stunting cases, and the community was taken as a sample of the West Aceh Regency area, with a sample of 114. The study was selected intentionally and is close to each other.

The population in this study was the entire patient's family living in one house and the community in the area. This population selection was based on the consideration that the patient's family and the community have an important role in awareness and quick decision-making. The research sample was determined using a purposive sampling technique, with inclusion criteria being respondents aged <20 years, who live in the same house. Meanwhile, respondents with cognitive impairment or severe communication barriers were not included in the research sample. From the existing population, a total sample size of 140 respondents was determined, divided proportionally in each region, with an average of approximately 28 respondents in each

area of West Aceh District. This number is considered sufficient to support the quantitative analysis to be conducted, particularly in testing the correlation between West Aceh Regency and the awareness of the patient's family and the community based on the integrated eight actions model.

IV. DATA ANALYSIS

Data management in this study uses SEM-PLS (Structural Equation Modeling-Partial Least Squares) software to test the correlation between research variables and prove the hypothesis proposed by the researcher regarding Prevention based on the integrated eight actions model. Regression tests are conducted to obtain valid data related to the questionnaire value indicators, using a Likert scale approach. This Structural Equation Modeling (SEM) model is set to analyze the relationship between variables, where SEM is used to evaluate the structure of the relationship between the hypothesized independent and dependent variables. SEM allows researchers to test complex models involving many latent variables and causal relationships between them, by considering measurement error and construct validity simultaneously. This SEM model is very suitable for testing complex hypotheses and provides a deeper understanding of the dynamics of the variables in this study.

The results of demographic data from respondents in West Aceh show that from the indicators Age, Education level, Job, Wealth status, Residence, while for the eight action model indicators with variables: Situation Analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of the village, Coaching, Data management system, Stunting Measurement and Publication, Performance Review. The following are the percentage frequency results:

Table 1. Indicator description.

Indicator	Category	Frequency	Percentage (%)
Age	< 20 Years	25	18
	20 - 35 Years	102	73
	> 35 Years	13	9
Education level	No education	21	15
	Primary	17	12
	Secondary	91	65
	Higher	11	8
Job	Civil servant	21	15
	Private	25	18
	Farmer	21	15
	Housewife	73	52
Wealth status	Poorest	11	8
	Poorer	23	16
	Middle	68	49
	Richer	26	19
	Richest	12	9
Residence	Urban	38	27
	Rural	102	73
X1 Situation Analysis	Good	92	66
	Enough	48	34

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Education level	No education	21	15
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	Higher	11	8
X2 Activity plan	Good	87	62
	Enough	53	38
X3 Stunting discussion forum	Good	77	55
	Enough	63	45
X4 Regent/Mayor regulation on the role of the village	Good	88	63
	Enough	52	37
X5 Coaching	Good	92	66
	Enough	48	34
X6 Data management system	Good	78	56
	Enough	62	44
X7 Stunting Measurement and Publication	Good	73	52
	Enough	67	48
X8 Performance Review	Good	91	65
	Enough	49	35

Source: Data primer, 2025.

The characteristics of respondents in this study indicate a high tendency for participation from the 20-35 years age group (73%), which is within the productive age range. This group generally has high energy and motivation in exploring new approaches in prevention practices, including Prevention based on the integrated eight actions model. In terms of education, the majority of respondents had a secondary academic background (65%), which indicates that the majority of respondents who participated had obtained a more comprehensive information foundation. This education plays an important role in increasing awareness and shaping respondents' cognitive and reflective abilities regarding Prevention based on the integrated eight actions model.

The variety of occupations of the respondents was also an important aspect in this study. Although there was a group of almost half housewives (52%), in raising awareness, a mother has an extraordinary role in influencing the awareness of respondents as policy makers. The variation in wealth status of the respondents was also an important aspect in this study. Although there was a group of almost half middle (49%), with good economic conditions, who will support Prevention facilities based on the Integrated Eight Actions Model. In addition, residence was an important aspect in this study; respondents were more rural (73%). This can describe the facilities around the respondents because in rural areas, many aspects are considered, starting from accessibility and facilities, and infrastructure in the respondents' place.

Based on Table 1, the Indicator Situation Analysis shows good (66%), which is a positive value that will contribute to prevention based on the integrated eight actions model. The activity plan with Good results (62%) shows that thorough planning will provide clear direction and objectives for this prevention, while the Stunting discussion forum good (55%) shows that the discussion will provide complete and more

comprehensive information in preventing stunting, regent/mayor regulation on the role of village shows good results (63%) shows that regulations and rules in the village determine policies in preventing stunting, this is very important so that program policies will be supported by policies or rules in the village as a form of support in preventing stunting, coaching shows good (66%) shows that training and guidance are very supportive, especially for competency-based human resources and directed and measurable information on health workers, cadres, community leaders and families is a strategic step in empowering them for stunting prevention, data management system good (56%) is more, this really describes the quantity and quality of problems or supporting images with accurate and measurable data will make it easy to calculate the advantages and disadvantages as well as strengths in supporting stunting prevention, in contrast to the stunting measurement and publication indicator good (52%) can be used as a benchmark for success or things that need to be improved in stunting prevention and the last indicator is performance review.

The results of variable reliability for the eight action model indicators with variables: situation analysis, activity plan, stunting discussion forum, regent/mayor regulation on the role of the village, coaching, data management system, stunting measurement and publication, performance review with value: Cronbach's Alpha, Rho A, Composite Reliability, Average Variance Extracted (AVE). The following are the results:

Table 2. Results of composite reliability and Cronbach's alpha examination.

Construction	Cronbach's Alpha	Rho A	Composite Reliability	Average Variance Extracted (AVE)
Situation Analysis (X1)	0.851	0.872	0.861	0.837
Activity plan (X2)	0.755	0.865	0.932	0.791
Stunting discussion forum (X3)	0.683	0.843	0.857	0.780
Regent/Mayor regulation on the role of the village (X4)	0.876	0.772	0.737	0.788
Coaching (X5)	0.885	0.824	0.838	0.977
Data management system (X6)	0.821	0.771	0.775	0.769
Stunting measurement and Publication (X7)	0.815	0.844	0.748	0.842
Performance review (X8)	0.865	0.861	0.768	0.814
Awareness (Y)	0.875	0.852	0.977	0.872

Source: Processed from primary data using Smart PLS tools, 2025.

Examination of construct reliability through analysis of Cronbach's Alpha, composite reliability, Rho A, and Average Variance Extracted (AVE)shows that all indicators in each construct have a good level of reliability. Cronbach's alpha and composite reliability suggest that the constructs have strong internal consistency. The values of Cronbach's Alpha consistently show that the internal consistency of each construct is in the very adequate category, which indicates that the items in the construct are able to measure the intended aspects stably. The results of Composite Reliability also strengthen this finding with high values across all constructs, indicating that the measurement variables have strong composite reliability in reflecting the latent construct. Furthermore, the values Rho_A. values Rho_A The results obtained for each construct provide additional confirmation of internal consistency and support the accuracy of the reliability estimates used in the partial least squares Structural Equation Modeling (PLS-SEM) approach. The indicators used have demonstrated the ability to consistently measure important dimensions in the Integrated Eight Actions Model-based prevention. This can be seen from the representation of measurements such as Situation Analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of village, Coaching,

Data management system, Stunting measurement and Publication, Performance review with Awareness in stunting prevention based on the Integrated Eight Actions Model.

All constructs also show values Average Variance Extracted (AVE)above the minimum threshold of 0.50, indicating that a sufficiently high proportion of the indicator variance is explained by the latent construct. Thus, the convergent validity of all constructs has been adequately achieved. This reliability and validity indicate that the instrument used in this study is reliable for measuring stunting prevention based on the integrated eight actions model.

Table 3. Model Fit and reliability

	Saturated model	Estimated model
SRMR	0.144	0.102
d_ULS	4.387	4.478
d_G	3.361	3.371
Chi-square	1179.091	1201.632
NFI	0.812	0.802

Source: Processed from primary data using Smart PLS tools, 2025.

The model fit coefficients reveal that the estimated model has a fair fit, with a lower SRMR (0.102) than the saturated model (0.144), however chi-square values are high and NFI was equal to indicating a good fit, as is normal in SEM with large data.

1. THE RESULTS OF STUNTING PREVENTION BASED ON THE INTEGRATED EIGHT ACTIONS MODEL.

The model results in Figure 1 show a fixed model with the variables Situation Analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of the village, Coaching, Data management system, Stunting Measurement and Publication, Performance Review in Stunting Prevention Based on the Integrated Eight Action Model.

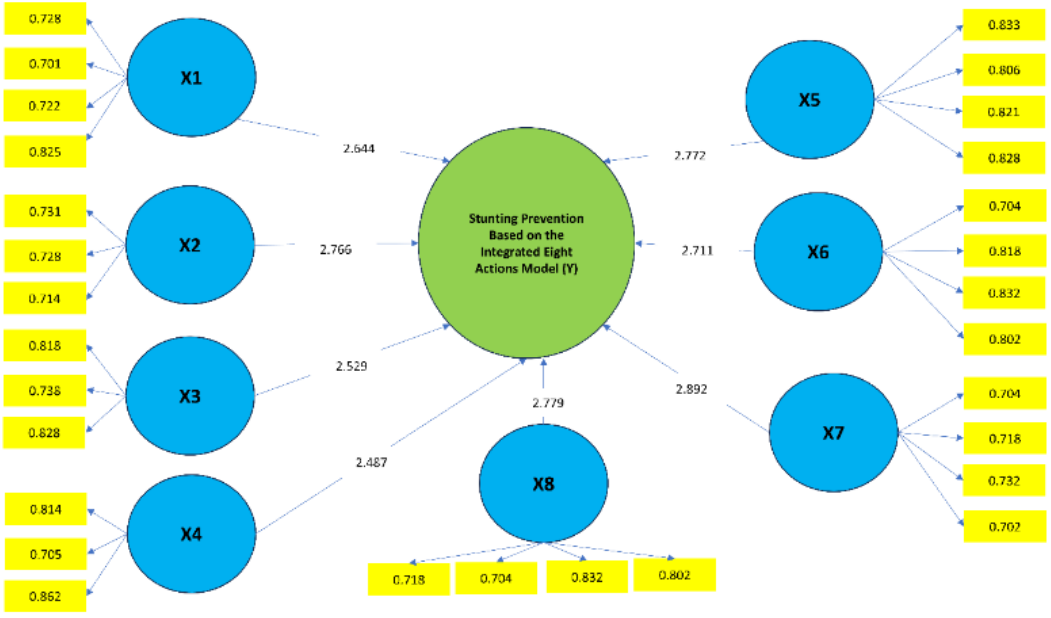

FIGURE 1. Stunting prevention based on the integrated eight actions model.

2. THE RESULTS OF HYPOTHESIS TESTING FOR THE EIGHT-ACTION MODEL

The results of hypothesis testing for the eight-action model indicators with variables: Situation Analysis, Activity plan, Stunting discussion forum, Regent/Mayor regulation on the role of the village, Coaching, Data management system, Stunting Measurement and Publication, Performance Review with value: β, Standard deviation, STDEV, T-Value , P-value, Effect size (F2), Hypothesis. The following are the results:

Table 4. Results of hypothesis testing.

Paths	B	SD	STDEV	T-Value	P-value	F^2	Hypothesis
Situation Analysis (X1) → Stunting Prevention (Y)	0.572	0.252	0.095	2.644	0.042	0.201	Accepted
Activity plan (X2) → Stunting Prevention (Y)	0.659	0.282	0.203	2.766	0.041	0.517	Accepted
Stunting discussion forum (X3) → Stunting Prevention (Y)	0.729	0.267	0.087	2.529	0.031	0.739	Accepted
Regent/Mayor regulation on the role of village (X4) → Stunting Prevention (Y)	0.570	0.561	0.182	2.478	0.012	0.241	Accepted
Coaching (X5) → Stunting Prevention (Y)	0.769	0.368	0.095	2.772	0.044	0.725	Accepted
Data management system (X6) → Stunting Prevention (Y)	0.669	0.377	0.079	2.711	0.023	0.401	Accepted
Stunting measurement and Publication (X7) → Stunting Prevention (Y)	0.689	0.214	0.061	2.892	0.017	0.621	Accepted
Performance review (X8)→ Stunting Prevention (Y)	0.709	0.478	0.059	2.779	0.016	0.401	Accepted

Source: Processed from primary data using SmartPLS tools, 2025.

The results of hypothesis testing show that all indicators in stunting prevention based on the Integrated Eight Actions Model have a significant correlation with the awareness of patient families and the community. The Integrated Eight Action Model-Based Prevention resulted in a significant correlation in increasing patient and community awareness, simultaneously. The results of Structural Equation Modeling (SEM) show that all dimensions of Prevention based on the Eight Integrated Action Model, namely Situation Analysis (β = 0.572; p = 0.042), Activity Plan (β = 0.659; p = 0.041), Stunting Discussion Forum (β = 0.729; p = 0.031), Regent/Mayor Regulation on the Role of Villages (β = 0.570; p = 0.012), Guidance (β = 0.769; p = 0.044), Data Management System (β = 0.669; p = 0.023), Stunting Measurement and Publication (β = 0.689; p = 0.017), to Performance Review (β = 0.709; p = 0.016) are significantly related to outcomes. Furthermore, the effect size (f^2) biggest was calculated at 0.739, indicating moderate to strong practical significance. These results support the hypothesis that the high coefficient of determination confirms that this model is not only valid but also has strong predictive power in explaining the transformation of stunting prevention awareness holistically. Situation Analysis of stunting prevention based on the Integrated Eight Actions Model has been shown to have a significant positive contribution, indicating that Situation Analysis of stunting prevention based on the Integrated Eight Actions Model is an important foundation in the effectiveness of interventions. Activity plans for stunting prevention based on the Integrated Eight Actions Model in planning also play a real role in improving the quality of stunting prevention services, Stunting discussion forums contribute significantly in supporting stunting prevention with accurate information in an accountable and comprehensive manner, then Regent/Mayor regulation on the role of village indicates that the consistency of existing regulations in

the village and this certainty is able to provide a direct correlation to the process of stunting prevention. Furthermore, Coaching support for stunting prevention based on the Integrated Eight Actions Model has provided a significant correlation, indicating patients and the community to participate in training and supplies so that the information received by patients and the community in increasing the effectiveness of stunting prevention based on the Integrated Eight Actions Model, which confirms that strengthening human resource capacity is a key element in successful implementation. Equipped with a data management system from patients, families, and the community, the program is targeted, a strategic element in the sustainability of stunting prevention. Similarly, Stunting measurement and publication show significance, reflecting that stunting prevention is measurable and can be evaluated, thus creating a health environment that supports the publication or actual conditions without covering up or eliminating information. Performance reviews also proved significant, illustrating that direct experience and internalization of stunting prevention based on the Integrated Eight Actions Model, showing that the perception of patient families and the community provides performance in stunting prevention based on the Integrated Eight Actions Model, and since the planning stage is able to provide added value to the performance or contribution of patient families and the community in a holistic therapeutic approach. Overall, these results support the hypothesis that each component in stunting prevention based on the Integrated Eight Actions Model makes a real contribution to the awareness of patient families and the community, which is more effective and sustainable.

The results of this study confirm that the Integrated Eight Actions Model-based prevention significantly increases the awareness of patients, families, and the community. Structural equation modeling (SEM) findings show that all independent variables ranging from Situation Analysis (X1), Activity plan (X2), Stunting discussion forum (X3), Regent/Mayor regulation on the role of village (X4), Coaching (X5), Data management system (X6), Stunting measurement and Publication (X7), Performance review (X8) have a significant positive influence ($p < 0.05$) on outcomes. The high coefficient of determination proves that this model is able to explain most of the variability in the results, indicating that the Integrated Eight Actions Model-based stunting prevention approach is not only an additional intervention design model, but a core component model that can increase awareness of patient families and the community more effectively and consistently.

The findings of this study on demographic features are consistent with prior research, which revealed that stunting is caused by socio-cultural and demographic factors in the family, family nutritional behavior, and a family environment that is prone to stunting. In addition, a paradigm of health education and family empowerment based on family sociocultural variables was developed It is emphasized that This study discovered that family sociocultural characteristics are a strong predictor of stunting. As a result, further study is needed to fully grasp the complexities of the stunting problem [32]. Other results are shown in the study, Children in rural Pakistan are more severely impacted than those in urban areas, with rates of 58.76 and 41.24, respectively. According to our findings, 24.93% of children suffer from stunting, with a higher incidence among children aged 8 to 11. The study indicated that mother or caregiver literacy had a substantial impact on their children's health. As a result, the Stunting Diagnostic and Education application was developed to assist families and communities in recognizing stunting and learning how to prevent it [33]. These results were emphasized in other studies that Families' function, knowledge, and perspectives all have a significant impact on the nutritional condition of children. Because these three factors are interconnected, dietary advice is provided to more than just mothers. It also involves the extended family, where the children and mother reside and care for each other [34]. This is supported by other research that in Indonesia the findings indicated a wide range of techniques used, including direct counseling, instructional materials, social media campaigns, and community events. Data analysis revealed problems in program execution, including low community involvement, restricted access to health services, and budgetary limits. However, the studies also indicated ways to increase program efficacy, such as collaborating with community groups and using culturally appropriate techniques. This study provides useful information for designing more effective tactics for raising public awareness about stunting and encouraging positive behavior change to avoid stunting in future generations. Finally, while education and advertising are important in stunting prevention efforts, long-term and coordinated efforts are required to produce a significant impact [35]. The stunting analysis results are used as digital data, which has

considerable value in program creation for speeding stunting reduction. However, in this process, local government transparency is also required to provide access to important stakeholders, resulting in data that may be utilized to reduce stunting the next year. Stunting Information Preparedness is required to sustain government integration continuity, due to the heterogeneity of the five provinces on the island of Kalimantan. The integration given in this study also describes the outcomes that may be accomplished in each district/city, making efforts to reduce stunting more measurable in terms of both quality and quantity [36]. There are still other proven incidents in Indonesia that This study demonstrates that the effectiveness of stunting prevention programs is dependent on efficient coordination among multiple stakeholders, notably in the hamlet where the patient's family lives. The study emphasizes the importance of social capital, which includes social networks, collective norms, and trust, in boosting stunting reduction initiatives. More study is needed to investigate the unique impact of social capital in various Indonesian contexts and to create intervention models that are more responsive to local socioeconomic and cultural characteristics [37]. Based on the Stunting discussion forum, other studies show that the study discovered major challenges to program involvement, including the presence of social practices that contradicted the program's aims and a pervasive lack of knowledge of the significance of nutritional food security. These issues pose significant barriers to properly fulfilling the program's potential benefit. Direct observations demonstrated the program's effectiveness in areas with robust community health infrastructure. Focus group talks highlighted the necessity of cultural sensitivity in program implementation, since local customs and traditions had a substantial impact on participation rates. In-depth interviews with healthcare professionals revealed logistical problems such as inconsistencies in nutritional supplement supply chains and deficiencies in health worker training. Village government officials underlined the need for more interagency collaboration to simplify services and decrease redundancy. Regardless of these problems, the program's achievements were clear. Participants praised the comprehensive approach, which included immediate dietary help with educational components aimed at promoting long-term health behaviors. To achieve better success, the program must address the identified hurdles through focused interventions, such as expanded community information campaigns, improved logistical assistance, and greater cultural integration into the program model [38]. This finding is made more complex by this study that the goal of developing a health promotion model based on stunting prevention and social capital was to increase maternal stunting preventive behavior [39]. It is explained again in this research that Our findings demonstrate that child stunting may be reduced even in varied and difficult settings. We propose that our framework for organizing nutrition interventions as direct/indirect and inside/outside the health sector be used when mapping causal pathways of child stunting and planning interventions and strategies to reduce stunting to meet the 2030 Sustainable Development Goals [40].

V. CONCLUSION

This study convincingly proves that the Integrated Eight Actions Model-based Prevention produces a significant correlation in increasing patient and community awareness, simultaneously. Structural equation modeling (SEM) findings confirmed that all Integrated Eight Actions Model-based Prevention dimensions such as Situation Analysis ($\beta = 0.572$; $p = 0.042$ vs. $p<0.05$), Activity plan ($\beta = 0.659$; $p = 0.041$ vs. $p<0.05$), Stunting discussion forum ($\beta = 0.729$; $p = 0.031$ vs. $p<0.05$), Regent/Mayor regulation on the role of village ($\beta = 0.570$; $p = 0.012$ vs. $p<0.05$), Coaching ($\beta = 0.769$; $p = 0.044$ vs. $p<0.05$), Data management system ($\beta = 0.669$; $p = 0.023$ vs. $p<0.05$), Stunting measurement and Publication ($\beta = 0.689$; $p = 0.017$ vs. $p<0.05$), to Performance review ($\beta = 0.709$; $p = 0.016$ vs. $p<0.05$) statistically contributed positively to the outcome. The high coefficient of determination confirms that this model is not only valid but also has strong predictive power in explaining the transformation of awareness of stunting prevention holistically.

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