



PELITA ASI: Combating stunting through breastfeeding awareness in Gunung Sindur

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Abstract

Stunting can arise due to malnutrition, particularly in the crucial first 1000 days of life. Data from the Bogor District Health Service in 2022 reveals a stunting rate of 9.8 percent in Bumi Tegar Beriman. PELITA ASI is a maternal movement dedicated to nurturing toddlers, aiming to raise awareness among mothers in the prevention of stunting through breastfeeding. The program involves various groups, including cadres, pregnant women, mothers of toddlers, and other potential participants, integrating targeted and sensitive interventions. The primary goal is to enhance the knowledge of cadres and educate mothers of toddlers on the crucial role of breastfeeding in preventing stunting. The success of these activities is evident through a series of well-executed events, marked by a notable increase in participants' knowledge. Pre-test and post-test calculations on 35 participants demonstrated an average knowledge increase of 1.57.

Keywords: Breast milk; Toddler; Stunting prevention

PELITA ASI: Upaya pencegahan stunting di Gunung Sindur

Abstrak

Stunting dapat terjadi sebagai akibat dari kekurangan gizi, terutama dalam 1000 hari pertama kehidupan. Data dari Dinas Kesehatan Kabupaten Bogor pada tahun 2022 menunjukkan bahwa tingkat stunting di Bumi Tegar Beriman mencapai 9,8 persen. PELITA ASI (PKM Peduli Ibu Balita Ber-ASI) adalah gerakan ibu-ibu yang peduli terhadap balita dengan tujuan meningkatkan kesadaran ibu dalam upaya mencegah stunting melalui pemberian ASI. Kegiatan melibatkan kader, ibu hamil, ibu balita, dan kelompok potensial lainnya, dengan mengintegrasikan intervensi spesifik dan sensitif. Tujuan kegiatan ini adalah meningkatkan pengetahuan kader dan memberikan edukasi kepada ibu balita tentang pentingnya pemberian ASI dalam mencegah stunting. Serangkaian kegiatan berjalan dengan sukses, ditandai dengan peningkatan pengetahuan peserta. Perhitungan *pre-test* dan *post-test* pada 35 peserta menunjukkan bahwa edukasi yang dilakukan dapat meningkatkan pengetahuan sebesar 1,57.

Kata Kunci: ASI; Balita; Pencegahan stunting

1. Introduction

Short toddlers occurrence or commonly known as stunting is a nutritional problem among toddlers worldwide today. In 2017, 22.2% or around 150.8 million toddlers worldwide experienced stunting. Disseminate data of stunting toddlers collected by WHO shows that Indonesia is included in the third country with the highest in Southeast Asia region. Tackling childhood stunting is a high priority for reducing the global

burden of disease and for fostering economic development (Dewey & Begum, 2011). Average disseminates of stunting toddlers in Indonesia in 2005-2017 was 36.4%. In 2018, national stunting rate reached 30.8%, this figure shows that out of 10 Indonesian children, 4 of them suffer from stunting. Data of Bogor District Health Service in 2022, stunting rate in Bumi Tegar Beriman reached 9.8 percent.

There are various factors causing Indonesia to be ranked third highest in ASEAN with stunting toddlers, namely direct and indirect factors, direct factors related to stunting, including low birth weight (LBW), not exclusive ASI, inadequate nutritional intake. appropriate, child's health status or infectious disease, incomplete immunization, and genetic factors (García Cruz et al., 2017). Afterward, indirect factors are family characteristics in the form of parents' employment, parents' education and income (Apriluana & Fikawati, 2018), nutritional status of pregnant women, and environmental sanitation (Zaif et al., 2017). Factors which influence stunting occurrence interconnect each other, or are usually called multidimensional factors (Rahmawati et al., 2019).

According to national data, exclusive ASI disseminate has continuously increased. This is evident from Riskeddas data results in 2016 (29.5%), 2017 (35.7%), 2018 (37.3%) (Kemenkes RI, 2019). Nevertheless, this figure is still considered low because it has not reached government program target, namely 80% (Ministry of Health, 2018). According to Indonesian Pediatrician Association, low level of ASI is hampered by inadequate implementation of regulations. Rules regarding exclusive ASI are clearly stated in Law Number 36 of 2009 concerning Health and Government Regulation Number 33 of 2012 concerning Exclusive ASI. Both policies require exclusive ASI for 6 months supported by lactation provision facilities in various places.

Problem factors related to achieving exclusive ASI in Indonesia include, some mothers say that their ASI come out little or do not come out and is finally replaced with formula milk, there are still many health workers at the service level who do not care or are not in favor of fulfilling the baby's right to receive ASI. Exclusive, namely still encouraging giving formula milk to babies 0-6 months for the reason of increasing the baby's nutrition. Afterward, there are still very limited ASI counselors and educational, outreach, advocacy and campaign activities related to ASI have not been maximized. Thus, the ASI achievement program required by the government can be said to have not achieved its success target (Kemenkes RI, 2019).

Bogor District Government continues to focus on reducing stunting rates by disseminating stunting audits at Bogor District level in 2022. This dissemination is to accelerate stunting rates reduction through Indonesian Stunting Rate Reduction Action Plan (RAN-PASTI), with an approach to families at risk of stunting. Stunting audit dissemination at Bogor District level aims to identify stunting risk in the target group, to find out stunting risk causes in the target group as an effort to prevent and improve similar cases management. Afterward analyze risk factors for stunting in stunting toddlers as an effort to prevent, handle cases and improve management of similar cases, afterward provide recommendations for handling cases and improving case management as well as prevention efforts which must be conducted.

Community participation is very much needed in government's efforts to prevent stunting. Community behavioral problems which are factors causing stunting include 1) Lack of environmental cleanliness, 2) Mother's lack of knowledge about health and nutrition, 3) Parents' busyness, and 4) Poverty. There is an influence of health education

about stunting on the knowledge of parents (Astarani et al., 2020). PELITA ASI (PKM Caring Mothers for ASI Toddlers) is a movement of caring mothers for toddlers which is conducted jointly and continuously in order to increase mothers' awareness in efforts to prevent stunting through ASI with target of all mothers, mainly cadres, pregnant mothers and toddlers' mother as well as other potential groups with integrating all specific interventions and sensitive interventions.

The partner of this community service program is Curug Village, Gunung Sindur District, Bogor Regency. Curug Village is a village which is geographically located in an industrial and agricultural environment. Real data of February 2022, toddlers number aged 0-59 months was 438,365, and toddlers number weighed was 365,001 (83.26%). Afterward, nutritional status was determined with results being underweight as many as 18,863 (5.17%), stunting toddlers as many as 28,657 (7.91%), and undernourished toddlers as many as 16,479 (4.53%). (Bogor District Public Communication / Diskominfo Team). Interview result with 4 posyandu cadres and mothers with toddlers, information was obtained that in the village where PKM was conducted there were still mothers who did not give colostrum because they thought that the colostrum came out was stale ASI, babies were still given MPASI from an early age, MPASI given had not met optimal nutritional component standards yet, and working mothers as a reason for not giving ASI exclusively. From results of situation analysis and discussions with partners, several things were formulated:

- a. Mothers and families lack of knowledge about exclusive ASI and ASI for working mothers, not exclusively ASI for babies
- b. Habit of giving MP-ASI to babies aged less than 6 months. The type of MP-ASI is not appropriate to age and the menu is not varied
- c. Cadres and toddler mothers lack of skills in making MP-ASI made from local food
- d. Cadres and toddler mothers have never received counselling or training on how to make safe and healthy MP-ASI.

From the problems faced by partners, this community service program PELITA ASI community movement (PKM Caring Mothers for ASI Toddlers) is to increase knowledge of cadres and toddler mothers about ASI importance in preventing stunting, as well as improve cadres and toddler mothers' skills through training demonstrations in making additional food according to the child's age.

2. Method

Series of PKM Community Service Activities for Caring Mothers for ASI Toddlers (PELITA ASI) in Efforts to Prevent Stunting in Curug Village, Gunung Sindur Sub-District, Bogor, West Java is an innovative activity conducted to break stunting chain in children and to educate toddler mothers about the importance and benefits of ASI in child growth and development. PKM activity took place on Saturday, June 24 2023 at Posyandu Mawar, Curug village, Gunung Sindur sub-district, Bogor City. This activity was attended by RT 07 women and the head of Posyandu Mawar cadres, posyandu cadres (10 people), and toddler mothers (30 people) from Curug Village, Gunung Sindur Sub-District, Bogor, West Java. The implementation methods used in this community service activity include:

a. Problem identification and planning

Based on the research results and surveys conducted, the problems identified include: (1) Not giving exclusive ASI to babies, mothers and families lack of knowledge about exclusive ASI and ASI for working mothers, (2) habit of giving MP-ASI to babies aged less than 6 months, the type of MP-ASI is not appropriate for age and the menu is not varied, (3) Cadres and toddler mothers have never received counseling or training on how to breastfeed correctly

b. Implementation

The solutions which can be offered with partners to overcome the problems found include: (1) Providing health education about exclusive ASI. (2) Providing health education about complementary foods for ASI. (3) Providing training regarding the correct way to breastfeed. The problem-solving methods which will be implemented include: (1) Conducting a pre-test and post-test on the mother's knowledge about exclusive ASI and MPASI, (2) Teaching the correct way to breastfeed.

c. Evaluation

The evaluation was carried out by measuring the level of pre- and post-intervention knowledge. The success indicators which can be targeted to overcome problems include: (1) All cadres and toddler mothers have 90% increased knowledge, success is measured using a questionnaire given during the pre and posttest, (2) All cadres are able to accompany mothers thus they continue to breastfeed their babies with increased ASI coverage.

3. Results and Discussion

Program introduced in this PKM is PELITA ASI (Caring Mothers for ASI Toddlers) which focuses on the problem of providing ASI and MPASI by toddler mothers in order to achieve optimal growth in children, thus, to reduce stunting occurrence. Apart from that, in the PKM PELITA ASI activities, cadres and mothers are taught how to measure and monitor children's growth starting from BB and TB/PB, and will be given education about ASI benefits and how to breastfeed properly, as well as good complementary foods for ASI (MPASI) and according to the child's age.

The media which will be used in PKM PELITA ASI activities starts from Posters on the ASI Benefits, Booklets on the correct way to breastfeed. Questionnaires were used to measure the pre-test and post-test knowledge of toddler mothers and posyandu cadres. With the PKM PELITA ASI activity, it is hoped that it can raise enthusiasm among posyandu cadres in providing knowledge and training to toddler mothers about exclusive ASI importance, giving MPASI importance according to the child's age, and can become the forerunner for PELITA ASI cadres who continue to spread knowledge to the wider community. It is hoped that this PKM will be able to increase posyandu cadres' knowledge, as well as toddler mothers, about exclusive ASI benefits, and how to provide age-appropriate MPASI, in order to achieve optimal growth in children.

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in child growth and development. PKM activity took place on Saturday, June 24 2023 at Posyandu Mawar, Curug village, Gunung Sindur sub-district, Bogor City.

3.1. Problem identification and planning

The problem identification stage was carried out by analyzing documents from the health service and also in-depth interviews with stakeholders, namely village heads, community health center officers and cadres. The following problems were found (1) Not giving exclusive ASI to babies, mothers and families lack of knowledge about exclusive ASI and ASI for working mothers, (2) habit of giving MP-ASI to babies aged less than 6 months, the type of MP-ASI is not appropriate for age and the menu is not varied, (3) Cadres and toddler mothers have never received counseling or training on how to breastfeed correctly. From the problem formulation, the program plan drawn up is: 1) Providing health education about exclusive ASI. (2) Providing health education about complementary foods for ASI. (3) Providing training regarding the correct way to breastfeed.

3.2. Health education about exclusive ASI

The material presented was about exclusive ASI importance for child development and the boundaries between mother and child. The media used is a presentation using Power Point slides (Figure 1).



Figure 1. Educational media (PPT slides)

The learning media used in health education are presentation slides. The material presented includes stunting meaning, how to prevent stunting with 3 steps from WHO, namely:

- Exclusive ASI from birth to 6 months of age;
- Giving MP-ASI starting at 6 months of age
- Continue breastfeeding until the baby is 2 of age or more.

Exclusive breastfeeding for babies is beneficial for:

- Prevent disease
- Exclusive ASI can increase the baby's immune system. Helps baby's brain and physical development

- c. Helps the baby's brain and physical development process. Increase baby's intelligence.
- d. Strengthens baby's bones
- e. Reduces the risk of sudden infant death syndrome (SIDS)
- f. Reduces heart disease risk
- g. Reduces the risk of obesity
- h. Reduces the possibility of allergies

Meanwhile, for mothers, ASI overcomes trauma, can prevent breast cancer, is a natural contraceptive alternative, and can help reduce postpartum weight and reduce stress. The enormous benefits of exclusive ASI make correct knowledge regarding ASI an important point in preventing stunting.

The Health Education activity about Exclusive Breastfeeding ran smoothly even though it was hampered by several toddlers who were fussy during the event. High participant enthusiasm was indicated by 5 questions after the presentation session took place. Questions asked by participants were about mastitis, having 2 toddlers and what food intake should be consumed so that breast milk is smooth and of good quality.

3.3. Health education about complementary foods for ASI

The series of events then continued with Health Education about complementary foods for ASI. Complementary feeding can be started when the baby shows signs of being ready to eat. Babies can usually consume MPASI at the age of 6 months. As for the signs that the baby has arrived ready to eat is:

- a. The head is straight;
- b. Can bend down without help;
- c. The tongue protrusion reflex has diminished;
- d. Babies are interested when they see people eating;
- e. Tries to reach for food and opens his mouth when offered food

Giving MP-ASI starts with foods which have a very soft texture, followed by introducing finger foods and afterwards can be continued with fruit, cakes and other foods. Food type introduced can be boiled vegetables such as potatoes, carrots, broccoli and sweet potatoes. For fruit, apples, mango, papaya and banana can be introduced, then accompanied by eggs, cheese or meat which has been properly prepared.

Health Education about Complementary Foods for Breast Milk lasts 1 hour. 3 counseling participants asked questions about what foods should be avoided as complementary foods for breast milk, whether coconut milk, sugar and salt could be given. and whether it is permissible to give snacks in the form of fried food when it is 1 year old.

3.4. Training on the correct way to breastfeed

The final series from Abdimas is training on how to breastfeed properly. The correct way to breastfeed must consider 3 main aspects, namely:

- a. Breastfeeding time is adjusted to the baby's age, for babies less than 6 months, breastfeeding can be done 8-12 times.
- b. Breastfeeding should be done on both sides of the breast and done until the breast feels empty or the baby is full
- c. The remaining ASI after the baby is full can be stored with the aim of preventing mastitis and maintaining the milk supply for the baby.

During breastfeeding training (Figure 2), the service team explains and demonstrates correct breastfeeding practices. When breastfeeding, the position and attachment of the baby to the mother is very important thus the baby gets adequate nutrition, signs of correct position and attachment are:

- The baby's head and body form a straight line
- The baby's face faces the breast, the nose faces the nipple
- The mother holds/holds the baby's body completely so that the baby's body is close to the mother's body
- The baby is close to the breast, the mouth is wide open and the baby's chin touches the breast
- The areola above is more visible than below the baby's mouth
- The baby's lower lip turns outward



Figure 2. Breastfeeding training



Figure 3. Educational media (Leaflets)

Media used in this training were phantoms and leaflets which were distributed to participants (Figure 3). Participants' enthusiasm during the training was very high, indicated by the many questions asked. Participants also took part in practicing the correct way to breastfeed during the training. The breastfeeding training event lasted 1.5

hours. The enthusiasm of the participants was very high, as evidenced by their activeness in answering questions from the presenters. 3 participants took part in practicing how to breastfeed properly and correctly.

3.5. Evaluation

Pre-test and post-test results as material for evaluating the success of health education presented in the [Table 1](#). The calculation results on 35 participants showed that the education conducted could increase knowledge by 1.57.

Table 1. Pre-test and Post-test result

No.	Name	Pre-Test Score	Post-Test Score	Different Score
1	AYS	6	8	2
2	NH	8	8	0
3	IA	6	8	2
4	IKD	8	7	-1
5	RDA	8	8	0
6	IM	8	9	1
7	M	9	10	1
8	UY	7	8	1
9	R	9	10	1
10	S	6	8	2
11	SKS	6	8	2
12	N	8	9	1
13	SH	9	9	0
14	N	8	9	1
15	E	6	8	2
16	H	9	10	1
17	Y	10	10	0
18	J	9	7	-2
19	D	8	8	0
20	M	9	8	-1
21	S	6	8	2
22	US	7	9	2
23	K	9	8	-1
24	AI	5	8	-3
25	RS	6	8	2
26	KIA	4	9	5
27	WD	4	9	5
28	ZL	5	7	2
29	KM	6	9	3
30	KY	6	10	4
31	LP	3	10	7
32	A	5	7	2
33	C	7	9	2
34	V	3	9	6
35	G	5	9	4
AVERAGE SCORE		6.80	8.54	1,57

4. Conclusion

PKM Community Service for Caring Mothers for ASI Toddlers (PELITA ASI) in Efforts to Prevent Stunting in Curug Village, Gunung Sindur Sub-District, Bogor, West Java is an innovative activity conducted to break stunting chain in children and to educate toddler mothers about the importance of ASI and the benefits of ASI in child growth and development. This PKM activity took place on Saturday, June 24 2023 at Posyandu Mawar, Curug village, Gunung Sindur Sub-District, Bogor City, attended by 35 participants from cadre elements and mothers with toddlers. The series of activities ran successfully, marked by an increase in participants' knowledge from the results of pre-test and post-test measurements. Pre-test and post-test calculations results on 35 participants showed that the education conducted could increase knowledge by 1.57. Participants' enthusiasm was very high both in the question-and-answer session and participation in the training. The service team hopes that the program can be implemented by cadres continuously thus it targets a wider community.

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