# KEKEP Ibu Motivator Empowerment Program with a Digital Handbook as an Effort to Prevent Stunting

# Intan Mutiara Putri<sup>1,a)</sup>, Esi Putri Silmina<sup>2)</sup>, Ririn Wahyu Hidayati<sup>1)</sup>

<sup>1</sup>Faculty of Health Sciences, Univeristas 'Aisyiyah Yogyakarta, Yogyakarta, Indonesia <sup>2</sup>Faculty of Science and Technology, Universitas 'Aisyiyah Yogyakarta, Yogyakarta, Indonesia

<sup>a)</sup>Corresponding author: intan.mutiaraputri@unisayogya.ac.id

#### Abstract

The Nutritional Status of Toddlers in 2022 at Puskesmas (primary health center) Kasihan 1 revealed 79 cases of short toddlers (2.9%). Although this number decreased from the previous year which reached 4.6%, in absolute terms the incidence of stunting is still quite high. The handling of stunting has so far been carried out by all stakeholders, namely from the BKKN, the Head of Service to the village level. Meanwhile, the role of Puskesmas is in the form of assistance and direct intervention in cases of stunting. However, the combination of all stakeholders makes it difficult to find a comprehensive program for stunting prevention. KEKEP Ibu (Mothers Support Group Class) Motivator can be an extension of Puskesmas by providing direct CIE (Communication, Information, and Education) to the community. Two main problems are found, namely: Health service programs and Information Technology Approaches. The priority problems encountered are (1) Health services and the lack of nutritional program aids at puskesmas; (2) There are KEKEP Ibu motivators who do not have skills in comprehensive stunting prevention; (3) There is no digital-based media as a tool for providing CIE. This Community Service Activity aims to help empower KEKEP Ibu Motivators in a comprehensive stunting prevention effort by procuring an assistive tool in the form of a KEKEP Ibu digital motivator handbook and service model with participatory learning and action. The first stage of the assessment was to collect knowledge of KEKEP Ibu Motivator about stunting prevention. Stage two was planning and development planning and preparation for the implementation of the empowerment program and making IEC tools in the form of digital handbooks. Stage three was implementing a mini-workshop in introducing a stunting prevention program, training on making complementary food menus, and CIE simulation. Stage four was the evaluation of re-collecting the knowledge of KEKEP Ibu motivator about stunting prevention. The results of this activity showed that the level of knowledge of KEKEP lbu motivators in the low category decreased from the previous 43 people (84.3%) to 10 people (19.6%) while the knowledge in the high category increased by more than 100%, originally 8 people (15.6%) to 41 people (80.4%).

Keywords: Handbook Digital, Stunting, Cadre Empowerment

## INTRODUCTION

Puskesmas Kasihan I is one of 27 health centers in Bantul Regency, which is in Kasihan District. Administratively, *Puskesmas* Kasihan I has two working areas, namely Bangunjiwo and Tamantirto which consist of 29 hamlets with 51 *posyandu* (maternal health unit). The number of family heads in 2021 is 17,551 families, with an average number of family members of 3 people

per family. The population density in the working area of *Puskesmas* Kasihan I is an average of 4 per hamlet (Puskesmas Kasihan1, 2022).

Health efforts implemented so far have been more oriented towards the sick paradigm. Such a point of view is often misleading, as if you are sick, you can treat it and people can become healthy. This situation cannot be justified, because it is considered as a consumptive rather than productive health effort. Seeing this reality, it is necessary to find ways to make sick people healthy, while those who are healthy can maintain their prime condition. This statement is in line with the new health paradigm, where health development is more emphasized through promotive, preventive efforts compared to curative and rehabilitative efforts. To support these efforts, it is necessary to emphasize education and health counseling activities so that people avoid the potential for illness. Furthermore, another effort that can be done is to get used to adopting a healthy lifestyle. Referring to the factors that affect the degree of public health, namely behavior which approximately ranges from 30 to 40% (Indrastuty and Pujiyanto, 2019). The degree of public health is more influenced by the behavior of the community itself. Environmental factors provide the greatest influence on the degree of public health. More complex, these factors include the socioeconomic, biological, and physical environment. If left silent it will be increasingly difficult to intervene. Currently, Puskesmas Kasihan I carries out four health efforts such as: promotive, preventive, curative and rehabilitative. These activities are carried out evenly and in a balanced manner through eighteen Puskesmas activities. The focus on addressing nutritional problems is one of the priority programs being pursued. This condition confirms that the *Puskesmas* needs to develop an innovation program in community service efforts, especially in the digitalization era

Based on the results of monitoring the nutritional status of toddlers in 2022 at 51 *posyandu* in Bangunjiwo and Tamantirto areas, interesting data was found. A total of 2698 toddlers were examined, and the results were: 231 toddlers with underweight (8.5%), 79 toddlers with short (2.9%) and 180 toddlers with malnutrition (6.6%). Even though this number has decreased from the previous year (4.6%), there were more samples of toddlers examined, namely 3,000 toddlers (Puskesmas Kasihan1, 2022). These results confirm that the incidence of stunting at *Puskesmas* Kasihan 1 is still quite high.

Stunting is a condition in which a child experiences developmental delay. This condition is due to health conditions and nutritional intake that is not optimal. Stunting is often closely related to socioeconomic conditions, exposure to a disease, and inadequate nutritional intake in quantity and quality These multidimensional problems need solutions and strategies that can be implemented comprehensively. Collaboration from various parties and partnership programs need to be presented to overcome this situation. This problem is important to solve because it can affect the quality of future generations in facing the challenges and opportunities of the Demographic Bonus in 2045. This target is also a concern of the Regional Government of Bantul Regency. Policy makers continue to voice messages to optimize and improve the quality of society in handling stunting, especially at the hamlet level (Pemkab Bantul, 2019)

Based on the results of discussions held with dr. Ratna Ikawati as the Head of *Puskesmas* Kasihan 1 showed various things. The *Puskesmas* said that so far the handling of stunting had been carried out by all stakeholders starting from the BKKBN, Regional Heads, to Village Heads. Some of the programs carried out included: *Rembuk* (discussion) stunting, procuring PMT (Supplementary Feeding) funds for *posyandu* and providing stunting case detection kits. *Puskesmas* had a role in assisting and giving direct intervention in cases of stunting.

with a combination of all stakeholder lines, they have not been able to find an agreement in compiling a comprehensive stunting prevention program. The toddler class program implemented at the health center targeting stunted parents and toddlers has so far received little interest. In addition, there is a lack of CIE nutrition and growth and development aids, as well as minimal community follow-up. *Puskesmas* Kasihan 1 has health cadres called *KEKEP Ibu* Motivators at each *posyandu*. However, the reality on the ground is that cadres have not been equipped with good CIE skills and are not supported by digital tools, making it difficult to implement a stunting prevention program in a comprehensive manner. The *KEKEP Ibu* motivator network is expected to be an extension of the *puskesmas* in providing direct CIE to the community. The number of *KEKEP Ibu* Motivator health cadres is 52 people and represent *posyandu* in each region. The *KEKEP Ibu* program is a Mother Support Group Class formed by *Puskesmas* Kasihan 1 Bantul.

## METHOD

The implementation method uses the theory of Participatory Learning and Action (PLA) can be seen in Figure 1. This method is used as an approach to the learning process and interaction with the community which was adopted from the previous service activities of the proposing team. (Ismarwati *et al.*,2022)

- The first stage of the assessment is data collection related to the knowledge of the *KEKEP Ibu* Motivator about stunting prevention, as well as the need for assistive devices to optimize stunting prevention programs. Coordination and Licensing Steps for *Puskesmas* Kasihan I Bantul are necessary. Furthermore, a Focus Group Discussion is held with the partners to equalize perceptions and explore the needs of the partners. It is also important in reassuring targets for activities to be carried out. Furthermore, the coordination will also discuss the initial data collection on the skills of *KEKEP Ibu* Motivator regarding CIE for stunting prevention. The expected achievement of this activity is a joint agreement, namely the procurement of CIE tools, stunting program mini workshops and the creation of Digital Handbook media. It is also determined that 1 person per *posyandu* will be a representative of *KEKEP Ibu* Motivator who will take part in this program with a total of 51 people. Participation and the role of partners in this activity is to provide input and suggestions regarding the activities to be carried out. Partners also play a role in determining *KEKEP Ibu* Motivator participants.
- The second stage is planning and development planning and preparation for the implementation of the *KEKEP Ibu* Motivator empowerment program as well as procuring teaching aids such as Food Models, Breastfeeding Counseling Kits, Breastmilk flipcharts, Mother class flipcharts, stunting flipcharts, and my plate media flipcharts. The dedication team compiled a digital *KEKEP Ibu* Motivator Handbook and procured a Cadre Kit. Participation and the role of partners can help provide input for the perfection of the compiled media. Partners also help determine the time for the mini-workshop and provide input on the venue and send invitations to designate *KEKEP Ibu* Motivators.

- The third stage of implementation is in the form of an introduction to the stunting prevention program, a mini workshop on making complementaruy food menus and a simulation of CIE Motivator *KEKEP Ibu*. In this activity the participation and role of partners in this implementation participated in ensuring the participation of the *KEKEP Ibu* Motivator participants who were representatives from their respective *posyandu*.
- The fourth stage of Evaluation is by re-collecting the knowledge of the KEKEP Ibu motivator about stunting prevention. Partner participation and role in monitoring the implementation of *posyandu* on a regular basis are needed. The aim is to ensure that KEKEP Ibu Motivators provide CIE to mothers of toddlers at their *posyandu* using assistive devices and digital handbooks optimally.

#### RESULTS

The results of this community partnership service activity should be able to solve problems with partners with the solutions that have been done. The first problem was the lack of educational aids for the nutrition program at *Puskemas* Kasihan 1. The efforts made by the *puskesmas* in dealing with malnutrition were by providing direct intervention in their area. Parents of toddlers were asked to come to the health center by officers to get nutrition consultation services. Nutrition program aids needed such as: nutritional preventive promotion media and food teaching aids (food models). The solution to overcome this problem was to provide tools in the form of flipcharts, posters, leaflets and food display equipment to the community health center which had been accepted by Nutritionist as shown in Figure 2. So the outcome achieved was the availability of nutrition program tools at the Kasihan 1 Community Health Center.

The second problem was the lack of maternal *KEKEP Ibu* Motivator CIE skills in comprehensive stunting prevention. *KEKEP Ibu* Motivator could be a solution in preventing stunting, but in fact they did not have comprehensive knowledge about prevention. Even though all this time *KEKEP Ibu* motivators had received training related to maternal and child health, there were no certain specifications regarding stunting prevention. The solution provided was by holding a Mini Workshop for *KEKEP Ibu* Motivators. Mini workshop activities will be held on Wednesday-Thursday, 2-3 August 2023 at the Bangunjiwo Village Meeting Hall. This activity was attended by 51 KEKEP Motivators who are representatives of Posyandu cadres in the Bangunjiwo Health Center working area, which can be seen in Figure 3. In this activity the training materials and assistance provided were:

- Socialization of the stunting program, especially stunting data in *Puskesmas* Kasihan 1 area
- Communication, Information and Education (CIE) for health cadres
- Local food processing
- Training on compiling menus and making food complementary for toddlers
- Practice of making food complementary

The output of this activity is in the form of increasing participants' knowledge and skills regarding stunting prevention and management programs as seen in Figure 4. The level of knowledge of *KEKEP Ibu* motivators in the low category decreased from previously as many as 43 people (84.3%) to 10 people (19.6%) while knowledge in the high category increased by more than 100%, originally as many as 8 people (15.6%) to 41 people (80.4%). In addition, the cadres also practiced counseling and processing complementary foods with various ages. At

this practical stage the participants were divided into several groups. The menu was prepared with animal protein, vegetable protein, vegetable, and fruit complementary foods. In this mini workshop, the volunteers received a kit in the form of: Cadre bags, Stunting and breastmilk flipcharts, leaflets, and stationery.

The third problem was the absence of media in providing digital-based CIE. *KEKEP Ibu* Motivators in carrying out their role needed a handle that was easy to use directly. But, so far, the cadres were still using simple or conventional methods. Seeing this situation, an innovation strategy was needed from the *puskesmas* to create a more focused work program. The solution provided was in the form of making *KEKEP Ibu* Digital Motivator Handbook. The need for digital-based media and educational materials for stunting prevention was crucial. This could be used as an innovation program from *Puskesmas* Kasihan 1 Bantul. The output achieved was educational media that could be used by cadres in the form of a digital handbook as a comprehensive stunting prevention effort.

#### DISCUSSION

Handling stunting is one of the current national development priorities, with a target of reducing the stunting rate by 11.8% in 2024 (Bappenas, 2019). The focus is on handling stunting by providing specific nutritional interventions given at the First 1000 Days of Life. This 1000 Days of Life time is the right program for stunting control/handling, because this time is a critical period in brain growth and development (Kraemer, 2018). Utilization of *posyandu* as a form of community-based health effort (*UKBM*) in public health services can be a strategy in stunting management interventions because it focuses on pregnant women up to toddlers. *Posyandu* services are inseparable from the role of cadres who are the main drivers of *posyandu* activities. The active role of cadres is important because cadres influence the success of the *posyandu* program, especially in monitoring the growth and development of children. The duties of health cadres related to nutrition are to collect data and measure body weight and length/height and then record them on the Mother and Children Health (MCH) book, provide additional food and vitamin A, and conduct nutrition counselling. Cadres should also refer to *puskesmas* if there are toddlers who have lost or not gained weight in 2 consecutive months (Ministry of Health RI, 2012).

Based on several studies, health cadres who receive training will increase their knowledge and skills in providing CIE on stunting prevention. Although various methods and media can be used, what has proven to be the most effective is the lecture and discussion method with audiovisual media as much as 70% (Purwanti, 2019). Meanwhile, other activities using guidebook media increased by 40% (Vinci et al., 2022). This service activity has the output in the form of training and practice on IEC and the preparation of food complementary for stunting toddlers using various media such as power point slides, leaflets, flipcharts, besides that there is a Digital Handbook media that can be used by health cadres in a comprehensive stunting prevention effort. The output of this community service activity is the knowledge and skills of the cadres regarding the stunting prevention and treatment program with a high category of 80.4%. Increased training-based knowledge for cadres can be used in various ways, such as lecture, discussion, and practicum methods given by health workers to cadres. Empowerment of cadres through training using the lecture method has been shown to influence increasing the knowledge of health cadres (Mediani et al., 2020)

# CONCLUSIONS AND RECOMMENDATIONS

It can be concluded that this service activity has been running smoothly by looking at partner problems, the solutions that have been carried out and the output of the activity. In addition, an evaluation and program sustainability will be carried out in the field. The next steps after the community service activities have been completed are:

- Making the working area of *Puskesmas* Kasihan 1 a target area for student practice activities
- Carrying out periodic internal service activities with various multidisciplinary knowledge or study programs at Unisa Yogyakarta
- Collaborating with the village government in *Puskesmas* Kasihan 1 area to optimize the *KEKEP Ibu* Motivator network in comprehensive stunting prevention.

# ACKNOWLEDGMENTS

We thank the Ministry of Education and Culture for funding this community service activity and *LPPM* Unisa Yogyakarta for its support for this activity.

## REFERENCES

- Indrastuty, D. and Pujiyanto, P. (2019) 'Determinan Sosial Ekonomi Rumah Tangga dari Balita Stunting di Indonesia: Analisis Data Indonesia Family Life Survey (IFLS) 2014', *Jurnal Ekonomi Kesehatan Indonesia*, 3(2). Available at: https://doi.org/10.7454/eki.v3i2.3004.
- Ismarwati, I. *et al.* (2022) 'A Formation of Peer Counsellors in an Effort to Create a Youth Information and Counselling Center at SMP Muhammadiyah Banguntapan, Bantul Yogyakarta', *ABDIMAS: Jurnal Pengabdian Masyarakat*, 5(1), pp. 2066–2074. Available at: https://journal.umtas.ac.id/index.php/ABDIMAS/article/view/2141 (Accessed: 3 June 2023).
- Pemkab Bantul (2019) *Pentingnya Mencegah Stunting Demi Generasi Masa Depan Indonesia Website Pemerintah Kabupaten Bantul.* Available at: https://bantulkab.go.id/berita/detail/3992/pentingnya-mencegah-stunting-demi-generasi-masa-depan-indonesia.html (Accessed: 9 April 2023).
- Puskesmas Kasihan1 (2022) Profil Puskesmas Kasihan 1 Bantul.
- Indrastuty, D. and Pujiyanto, P. (2019) 'Determinan Sosial Ekonomi Rumah Tangga dari Balita Stunting di Indonesia: Analisis Data Indonesia Family Life Survey (IFLS) 2014', *Jurnal Ekonomi Kesehatan Indonesia*, 3(2). Available at: https://doi.org/10.7454/eki.v3i2.3004.
- 'Pentingnya Mencegah Stunting Demi Generasi Masa Depan Indonesia Website Pemerintah Kabupaten Bantul' (no date). Available at: https://bantulkab.go.id/berita/detail/3992/pentingnya-mencegah-stunting-demi-generasimasa-depan-indonesia.html (Accessed: 9 April 2023).

Puskesmas Kasihan1 (2022) Profil Puskesmas Kasihan 1 Bantul.

WHO (2018) Reducing stunting in children: equity considerations for achieving the Global Nutrition Targets 2025. Geneva: CC BY-NC-SA 3.0 IGO (Equity considerations for achieving the Global Nutrition Targets 2025), p. 40. Available at: https://apps.who.int/iris/bitstream/handle/10665/260202/9789241513647eng.pdf?sequence=1. APPENDIX

# Participatory Learning and Action (PLA)

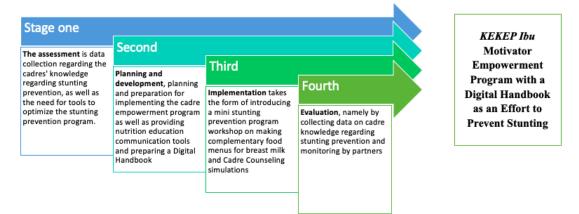


Figure 1. Method uses the theory of Participatory Learning and Action (PLA)



Figure 2. Delivery of nutritional education aids



Figure 3. Mini Workshop

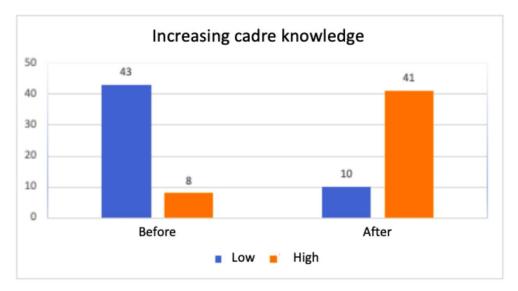


Figure 4. Increasing cadre knowledge