

## The CIPP Model of Stunting Management Program During Covid-19 Pandemic in Semarang City

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### ABSTRACT

**Background:** Semarang City has successfully reduced in reducing the stunting rate by 2.7% in 2018 and 2.5% in 2019. With the Covid-19 pandemic, the stunting prevention program in Semarang City faces problems that have the potential to increase the prevalence risk of stunting. The problem are limited access of intervention and decline of the stunting program quality in work area of the Puskesmas in Semarang City. In addition, it is still unknown how the stunting program was implemented at the puskesmas during the Covid-19 pandemic.

**Objectives:** The purpose of this research was to identify and evaluate the implementation of the stunting prevention program in Semarang City during the Covid-19 pandemic by using the CIPP model.

**Materials and Methods:** This research used a survey research with a qualitative approach. This research was carried out from August to October 2021. The informants for this study consisted of 5 main informants: nutritionists at the puskesmas, 15 triangulation informants, the head of the puskesmas, posyandu cadres, and mothers who had stunted children in five health centers in Semarang City, namely Bandarharjo Health Center, Lamper Tengah Health Center, Tlogosari Wetan Health Center, Gunungpati Health Center, and Pegandan Health Center. Determination of informants using a purposive technique based on the geographic location of the Public Health Center. In-depth interviews used prepared guidelines. Data analysis used content analysis.

**Results:** The results showed that the in the context component, the nutritionists had understood goals and targets of the stunting program. The input component showed that Human Resources was not optimal because they helped in succeed in the Covid-19 program. Funding was disrupted because there were still no technical guidelines for funding during the Covid, infrastructures were not optimal due to a lack of training for posyandu cadres. The process components included: a monitoring program that was carried out door to door, no administration of PMT F100, ineffective online counseling, fewer mothers who were participated in nutrition consultations, no monitoring related to vitamin A administration.

**Conclusion:** The stunting prevention program in the work area of the puskesmas during the Covid-19 pandemic has not been able to be implemented well during the Covid-19 pandemic.

**Keywords :** Stunting; CIPP Model ; Program

### BACKGROUND

Toddler is an age group that is prone to nutrition and disease. Undernourished toddler can cause disruption of physical, mental and spiritual growth and development and resulting in low quality of human resources. Nutritional status is an important health indicator for toddlers because children under five years of age are a group that is prone to health and nutrition whose physical impact is measured anthropometry and categorized based on WHO standards with the index of WAZ (Weight for Age Score), HAZ (Height for Age Z-scores) and WHZ (Weight/Height Z-scores).<sup>1</sup>

Reducing the stunting prevalence is one of the national priority programs in health development. Reducing of the stunting prevalence is listed in the main target in 2020-2024 Medium-Term Development Plan, it is improving the health and nutrition status of the community with a target of stunting prevalence in 2024, which is 14%.<sup>2</sup> Stunting are toddlers with nutritional status based on length or height according to When compared to the WHO-MGRS (Multicentre Growth Reference Study) standard, the z-score is less than -2SD and is categorized as very short if the z-score is less than -3SD. Toddlers who experience stunting will have an impact on the level of intelligence that is not optimal, more susceptible to disease and can be at risk of decreasing productivity levels. The result of a low level of productivity will have an impact on stunting economic growth and increasing poverty.<sup>3</sup>

Although the Ministry of Health has determined that reducing stunting prevalence is one of the national priority programs in health development, nationally the reduction in stunting prevalence has not been going

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well. This is evidenced by the prevalence of stunting in Indonesia, namely in 2017 it was 22.7%, in 2018 it was 30.8% and in 2019 it was 27.67%.<sup>3</sup>

Meanwhile, Semarang City is a city that has succeeded in reducing the stunting rate for toddlers, namely in 2017 by 14%, in 2018 by 2.7%, and in 2019 by 2.5%.<sup>4</sup> This is an achievement that can be used as an achievement. a reference for stunting prevention systems in Indonesia and Central Java.

In 2020, the world community witnessed the emergence of a new type of corona virus that causes coronavirus disease or what is now known as Covid-19. to accelerate the handling of the corona virus outbreak (Covid-19) in an effort to control Covid-19.<sup>5</sup> This can increase the risk of increasing the prevalence of stunting in the world, including Indonesia.<sup>6</sup> five years will increase by 14.3% or equivalent to 6.7 million additional cases.<sup>7</sup>

The Large-Scale National Restriction Policy in the Context of Accelerating the Handling of Covid-19 is contrary to the Stunting Prevention Program, because the stunting prevention program requires direct contact with the program target. This has led to an increase in the risk of stunting prevalence in Indonesia during the Covid-19 pandemic due to the obstruction of access for mothers and children in obtaining optimal health services. It was noted that only 19.2 percent of Public Health Center continued to run posyandu (Integrated Healthcare Center) activities during the pandemic. Based on data from the Ministry of Health, the number of antenatal care visits and health services for infants, toddlers, and children has decreased so that immunization services, monitoring activities for the development and growth of infants and toddlers, as well as maternal and child health interventions cannot run optimally. This is in accordance with Efrizal's research which states that a decrease in children's nutritional status can have an impact on increasing the prevalence of children at risk of stunting.<sup>6</sup>

Although Semarang has succeeded in reducing stunting for three consecutive years, with the Covid-19 pandemic, the stunting prevention program in the city of Semarang has several problems that have the potential to increase the risk of increasing stunting prevalence rates caused by limited access to interventions from stunting prevention programs and quality stunting program in the work area of the Semarang City Health Center. Limited access to health services has an impact on increasing the prevalence of children at risk of stunting.<sup>6</sup> In addition, it is not yet known how stunting programs are implemented in Public Health Center during the Covid-19 pandemic.

Therefore, to get a qualified health program, evaluation activities are needed. The CIPP ((context, input, process, product) Evaluation Model is an evaluation method that can be implemented to obtain qualified health programs because the advantages of the CIPP model provide a comprehensive and complete evaluation format at each evaluation stage, they are context, input, process, and product stages. Advantages of CIPP evaluation concept that an important purpose of evaluation is not to prove, but also to improve. This is in accordance with the evaluation of the stunting prevention program during the Covid-19 pandemic which emphasized program improvement in order to obtain a complete program quality.

Therefore, the researcher intends to evaluate the stunting prevention program for nutritionists in Semarang City as a city that is able to reduce the incidence of stunting and how to implement the handling program during the Covid-19 pandemic using the CIPP Evaluation model.

The purpose of this study was to determine and evaluate the implementation of stunting prevention programs in Semarang City during the Covid-19 pandemic using the CIPP model covering context aspects, namely Identification of Program Objectives and Targets, input aspects namely human resources, funds, facilities and infrastructure, process aspects, namely planning. programs, implementation programs, monitoring and evaluation and outcome aspects.<sup>8</sup>

## **MATERIALS AND METHODS**

This research used a survey research with a qualitative approach. This research was carried out from August to October 2021. Sources of data in this study included primary data (in-depth interviews with informants and observations), and secondary data consisting of nutritional status health data processed by the relevant health agencies (Bandarharjo Public Health Center, Lamper Tengah Health Center, Tlogosari Wetan Health Center, Gunungpati Health Center, Public Health Center Pegandan, Semarang City Health Office, and the Indonesian Ministry of Health). The research has passed ethical approval in Health Research Ethics Commite Faculty of Public Health Diponegoro University with number 239/EA/KEPK-FKM/2021.

The informants of this study consisted of 5 main informants, namely nutritionists at the puskesmas and 15 triangulation informants, namely the head of the puskesmas, posyandu cadres and mothers who had

stunting toddlers. Determination of informants using a purposive technique based on the geographic location of the puskesmas. After identification, a representative sample was obtained: the northern part of Semarang was the Bandarharjo Health Center; the eastern part of the Semarang was the Central Lamper Health Center ; the eastern part of the Semarang area was the Tlogosari Wetan Health Center; the southern part of the Semarang Public Health Center the Gunungpati Health Center; the middle part of the Semarang was the Pegandan Health Center.

The main informants in the research were those who directly handled and understood the implementation process of the stunting program. The main informants of this research consisted of 5 nutritionists and in charge of the stunting program at the Puskesmas Bandarharjo, Puskesmas Lamper Tengah, Puskesmas Tlogosari Wetan, Puskesmas Gunungpati, Puskesmas Pegandan. The triangulation informants in this research were 15 people with details of 5 head of puskesmas, 5 posyandu cadres and 5 mothers who had stunted toddlers. In this research, the research will focused on 4 aspects of the CIPP evaluation model, they are Context, Input, Process, Product that can explained how the stunting program during the pandemic were implemented

In-depth interviews were using prepared guidelines. Validity tests in qualitative research were included credibility tests (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity).<sup>9</sup>

The data analysis technique used in this research is to analyze all forms of communication, such as data derived from interview answers, manuscript documents, pictures, photos, and other information. The steps in the data analysis process are data reduction, data presentation, conclusion drawing, and verification.<sup>10</sup>

## RESULTS

### 1. Context Aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

Nutritionists as the person in charge for the stunting program were involved in policies making regarding to the stunting prevention programs at the puskesmas. Nutritionists understood and base program development based on the purpose of the stunting program at the Semarang city level during the COVID-19 pandemic, namely reducing the stunting prevalence rate.

*"tujuan program stunting saat pandemi ini, untuk menekan angka pandemi dengan keberjalanan program yang maksimal, sesuai arahan DKK " (IU 1)*

*"jelas to mas, tenaga gizi kan selaku koordinator program stunting, jadi kami terlibat dari awal sampe hasilnya gimana" (IU3)*

*"The purpose of the stunting program during this pandemic is to reduce the number of pandemics with maximum program implementation, according to the direction of the DKK" (IU 1)*

*"Obviously, sir, the nutritionist is the coordinator of the stunting program, so we are involved from the beginning until the results are there" (IU3)*

The informations were also supported by triangulation informations which stated that the main informant underlied the stunting program during the pandemic with the goal of the stunting program from the Semarang city level.

*"itu baru ya mas, iya mmm.. karena baru ya mungkin belum pernah ya disampaikan " (IT-KA 1)*

*"program di puskesmas, terutama stunting sudah sesuai dengan arahan kota, karena stunting merupakan program prioritas di kota semarang juga" (IT-KA 3) "That's new, sir, yes, mmm.. because it's new, maybe it's never been conveyed" (IT-KA 1)*

*"The program at the puskesmas, especially stunting, is in accordance with the direction of the city, because stunting is a priority program in the city of Semarang as well" (IT-KA 3)*

*"yang berbeda, tentu saja kegiatannya door to door mas, jadi dicek dari satu rumah ke rumah yang lain" (IU 1)*

*"untuk pelaksanaannya, nanti kader kan ada posyandu terus dicatat timbangan dan tinggi si anak. Nanti laporannya diserahkan ke kita lalu di cek di aplikasi buat lihat zscorenya. Semisal zscorenya termasuk kategori stunting, kita kesana buat ngecek bener ngga ini anaknya stunting. Kalau bener kita lakukan intervensi. Jadi sama mau pandemi atau tidak bedanya kita ngga di posyandu lagi tapi door to door" (IU 5)*

*"kalau bisa disebut kelebihan ya, lebih efektif mas karena bisa dapat semua data, tapi ya kasihan bu kadernya harus keliling keliling, nggih to bu? hehe (IU 1)*

"What's different, of course, is door to door, mas, so it's checked from one house to another" (IU 1)  
"For the implementation, there will be a posyandu for the cadres, and the scales and height of the child will be recorded. Later the report will be submitted to us and then checked in the application to see the zscore. For example, if the zscore is in the stunting category, we go there to check whether or not this child is stunted. If so, we will intervene. So whether it's a pandemic or not, the difference is that we're not at the posyandu anymore but door to door" (IU 5)  
"If you can call it an advantage, yes, it's more effective, bro, because you can get all the data, but it's a pity that the cadres have to go around, can't you, ma'am? hehe (IU 1)

Door to door monitoring is more effective than monitoring carried out at posyandu before the pandemic because it can reach all areas.

*"Kadang ke rumah lo anaknya tidur, kendalanya gitu mas lo mas, Ya to, kalau mau dibangunkan rewel, ya gitu to kendalanya disitu untuk pemantaunyanya (IU 5)*  
*"memang lebih capek daripada biasanya, tapi maug gimana lagi"(IU3)*  
"Sometimes when your child goes to your house to sleep, that's the problem, bro, yes, if you want to wake up fussy, yes, the problem is there for the monitoring (IU 5)  
"I'm more tired than usual, but what can I do"(IU3)

On the negative side, monitoring is difficult because some toddlers are sleeping when visited, in addition to the energy and energy expended by posyandu cadres.

## 2. Input aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

The input for the stunting prevention program during the pandemic at the puskesmas in the Semarang City consisted of human resources, funds, facilities and infrastructures.

Based on research conducted by Rustam, the efficiency and effectiveness of an implementation of a program depends on human resources.<sup>11</sup> Based on the results of in-depth interviews with key informants, it is known that the personnel who play role in the malnutrition prevention program at the Health Center are nutritionists, KIA officers, all Puskesmas employees, regional responsible persons, cadres in posyandu.

*"intinya, dari gizi, kader posyandu, dan kepala puskesmas sebagai pengawas"(IU 3)*  
*"Itu dari petugas puskesmas, kader posyandu ya" (IU 5)*  
"Essentially, from nutrition, posyandu cadres, and the head of the puskesmas as supervisors" (IU 3)  
"That's from puskesmas officers, posyandu cadres, yes" (IU 5)

In carrying out the stunting program the adequacy of officers is an important component in the implementation of a program.<sup>12</sup> The program can run well if the program has sufficient resources, but the program cannot run well if the resources are not sufficient.

*Kekurangannya yaa, otomatis kita belum bisa maksimal... karena kita tenaganya Cuma 2, yang satunya sering dilibatkan ke vaksin jadi otomatis susah gitu" (IU 1)*  
*"ya dimasa pandemi ini, beban kerja menjadi tambah" (IU 5)*  
The drawback is, we can't automatically maximize... because we only have 2 staff, the other one is often involved in vaccines, so it's automatically difficult." (IU 1)  
"Yes, during this pandemic, the workload has increased" (IU 5)

One component of the resources needed in implementing a health program is the health financing budget. The Health Budget aims to provide health financing in sufficient amounts, utilized and allocated equitably. During the Covid-19 pandemic, stunting funding was sourced from the BOK and BLUD Puskesmas. BOK is Health Operational Assistance from the State Budget and Expenditure Revenue (APBN)

Although there is a budget from the BOK, in its implementation during the pandemic, there was a temporary suspension of the flow of aid and BOK at the beginning of the year, because there was no technical guidance that regulates the funding of the BOK nutrition program during the Covid-19 pandemic.

*"untuk pendaan saat awal juga belum ada juknisnya jadi pas awal tahun agak mandeg" (IU 1)*  
*"iya dana BOK belum cair pada awal tahun" (IT-KA 1)*

"There is no technical guideline for funding at the beginning, so at the beginning of the year it stagnates a bit" (IU 1)

"Yes, BOK funds have not been disbursed at the beginning of the year" (IT-KA 1)

All key informants stated that the availability of infrastructure at all puskesmas was complete including body scales (stepping scales for adults and baby scales), measuring instrument for infant body length, microtoise to measure height, measuring tape/metline to measure head circumference, arm circumference, waist and hip circumference.

"Kalau sarpras di puskesmas sudah menunjang ya, kita punya peralatannya, tapi ya yang masih belum terealisasi itu yang di beberapa wilayah di posyandu" (IU 1)

"beberapa alat perlu dicek kembali karena ada yang kemungkinan sudah tidak layak pakai" (IU 3)

"ada mas di posyandu sebelah belum dapat bantuan, kadang pinjam alat dikita" (IT-KP 1)

"seperti timbangan badan bayi mas, sudah ngga bisa dipake, jadi biasanya kita pake timbangan biasa" (IT-KP 3)

"If the infrastructure at the puskesmas is already supporting, yes, we have the equipment, but yes, what has not been realized is in several areas at the posyandu" (IU 1)

"several tools need to be re-checked because some may not be suitable for use" (IU 3)

"There's a man at the posyandu next door who hasn't gotten help yet, sometimes he borrows tools from us" (IT-KP 1)

"It's like a baby's scale, you can't use it anymore, so we usually use a regular scale" (IT-KP 3)

Regarding the availability of infrastructure facilities in the posyandu area (Integrated Healthcare Center), two of the five main informants stated that the availability of infrastructure facilities in posyandu (Integrated Healthcare Center), was not evenly distributed, especially anthropometric tools between one region and another. Meanwhile, the two main informants confirmed by triangulation informants stated that some anthropometric tools were damaged and unfit for use. This, of course, must be given more attention because the implementation of the nutrition program is determined by the nutritional infrastructure, especially the anthropometric tool used as a measuring tool for the growth and development of toddlers.<sup>13</sup>

### 3. Process aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

Stunting prevention programs at the Puskesmas during the Covid-19 pandemic during the Covid-19 Pandemic were Monitoring toddlers, Providing PMT, Health Counseling, Nutrition Counseling at the Puskesmas and Giving Vitamins and Minerals. This is in line with Syahputra's research which states that the nutrition program at the puskesmas is in the form of monitoring, providing education, providing complementary foods and vitamins. Stunting prevention programs at the Puskesmas during the Covid-19 pandemic during the Covid-19 Pandemic were Monitoring toddlers, Providing PMT, Health Counseling, Nutrition Counseling at the Puskesmas and Providing Vitamins and Minerals. This was in line with Syahputra's research which states that the nutrition program at the puskesmas is in the form of monitoring, providing education, providing complementary foods and vitamins.<sup>8</sup>

"pertama pemantauan pertumbuhan, kemudian makanan tambahan, penyuluhan sama eee ada konseling di puskesmas mas" (IU 1)

"... dalam programnya untuk stunting ada pemberian PMT, promosi kesehatan, pemberian vitamin, zink dan ada pemantauan balita apakah dai stunting atau tidak" (IU 4)

"kita melaksanakan pemantauan, pemberian pmt, berupa kemarin itu saya kasih mpasi sama susu, dikasih vitamin juga, lalu pembinaan" (IU 5).

"First is growth monitoring, then additional food, counseling is the same as there is counseling at the Mas Health Center" (IU 1)

"... in the program for stunting there is provision of PMT, health promotion, provision of vitamins, zinc and there is monitoring of toddlers whether they are stunted or not" (IU 4)

"We carry out monitoring, giving PMT, in the form of yesterday I gave complementary milk, given vitamins too, then coaching" (IU 5).

### 4. Product aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

After monitoring and evaluating each activity carried out to see the quality of services from the stunting prevention program. Then a product evaluation was carried out, whether the stunting program during the current pandemic will be continued, modified or discontinued. Product indicators are

assessments carried out to measure the success of stunting prevention programs during the pandemic in achieving the goals that have been set. The data generated will greatly determine whether the activity will be continued, modified or discontinued in the stunting control program at the puskesmas during the pandemic. Evaluation of each activity of the stunting prevention program is presented to the head of the puskesmas which contains the implementation of activities, obstacles and performance achievements of the stunting prevention program during the pandemic. Covid-19.

*“lapornya kita paparkan ya mas, setahun sekali kalo pemaparan ke kapus. Tapi tiap bulan juga ada laporan rutin juga.”*

*(IU 5)*

*“minimal setaun sekali kita kumpul bersama membahas program” (IT-KA 5)*

*“We will explain the report, sir, once a year for the exposure to the head office. But every month there are also regular reports as well.”*

*(IU 5)*

*“at least once a year we gather together to discuss the program” (IT-KA 5)*

## DISCUSSION

### 1. Context Aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

To create a stunting program that is in accordance with the program's objectives, the Puskesmas as a health service organization as well as the holder of the stunting program is obliged to improve the quality of organizations and programs at the Puskesmas. Improving the quality of organizations and programs, especially the stunting program at Puskesmas during the Covid-19 pandemic, can be done by identifying the strengths and weaknesses of the organization.<sup>14</sup> By identifying the strengths and weaknesses of the organization, it is expected to improve the quality of policy making, especially policies related to stunting prevention program.

Based on the results of interviews regarding the objectives of the stunting prevention program during the Covid-19 pandemic, it was found that all informants understood that the purpose of the stunting program was primarily to reduce stunting during the Covid-19 pandemic, in addition, several key informants used various terms such as zero stunting, reducing stunting, stunting prevalence and maximize stunting programs.

All informants stated that the purpose of the stunting prevention program during the Covid-19 pandemic was based on directions from the Semarang City Health Office. Some of the main informants stated that the stunting program objectives directed by the Semarang City Health Office were adjusted to the vision and mission of each puskesmas.

Nutrition workers understand the advantages and disadvantages of organizations that are used as references in making stunting programs, namely: Government support, Posyandu Cadre activity, Limited access, lack of coordination with cross-sectors during the Pandemic, Negative public stigma towards health services during the Covid-19 pandemic. Understanding of the organization affects the effectiveness and efficiency of a program. In addition, identifying the strengths and weaknesses of the organization can increase the capabilities, independence, and resources owned.<sup>15,16</sup>

All key informants stated that the targets for stunting in the city of Semarang were stunted toddlers, pregnant women, mothers who had stunting toddlers and non-stunted toddlers. Two of the five main informants also explained the target for stunting under five, namely toddlers with a body length of less than 48 cm for boys and 47 cm for girls. This is in accordance with the target of the stunting program at the puskesmas that has been set by the Semarang City Health Office. Determining program targets is one of the important tools in formulating a program because program objectives act as the point we want to achieve.<sup>17</sup>

### 2. Input aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

The input desc<sup>12</sup>ription result of the three indicators have not implemented well during the pandemic. The quality component of nutrition officers can be said to be competent and qualified, this is evidenced by direct exposure from the head of the puskesmas and posyandu cadres as triangulation informants, in addition to support for educational competence, namely all nutrition officers with a minimum education of D3 nutrition science, and supported by training carried out by the DKK . The qualifications of nutritionists as coordinators of nutrition programs are in accordance with the Regulation of the Minister of

Health Number 26 of 2013 concerning the implementation of work and practice of nutrition workers. Qualified nutrition workers or officers affect the quality of the nutritional program quality.<sup>18,19,20</sup>

Meanwhile, the lack of skills of posyandu cadres, especially in monitoring children under five, is caused by the lack of training provided. Training is an effort to invest in human resources to improve work abilities and skills so that employee performance increases.<sup>21</sup> The effects of the Covid-19 pandemic, namely restrictions on mobility and budget changes during this pandemic, have resulted in the implementation of training not being able to be carried out properly. In carrying out the stunting program the adequacy of officers is an important component in the implementation of a program.<sup>12</sup> The program can run well if the program has sufficient resources, but the program cannot run well if the available resources are not sufficient.

From the results of the interview, it can be seen that the workforce is sufficient in the implementation of the nutrition program, namely at least one, this is in accordance with the minimum requirements for nutritionists in puskesmas in the Regulation of the Minister of Health of the Republic of Indonesia Number 75 of 2014. Although the adequacy of nutrition workers is in accordance with the Regulation The Minister of Health of the Republic of Indonesia Number 75 of 2014 but in its implementation during the pandemic there was an additional responsibility in each unit for the success of the vaccine program at the puskesmas which made the workload increase so that the nutrition program, especially stunting, was not optimal. This is in accordance with Permatasari's research which states that a heavy workload affects the quality of work, which has an impact on the organization.<sup>22</sup>

From the results of the interview, From the results of the interview above, it is known that the source of funds in the implementation of the stunting program during the Covid-19 pandemic is from the BOK and BLUD Puskesmas. BOK is Health Operational Assistance from the State Budget and Expenditure Revenue (APBN), the Ministry of Health and is central government assistance to regional governments which is channeled through the co-administration task mechanism to accelerate the achievement of priority health program targets.<sup>23</sup>

Funding that is hampered due to the absence of technical guidelines for funding during the Covid-19 period is a problem in the implementation of stunting prevention programs because funds have a very important role in stunting prevention programs, so that health costs must be available in sufficient quantities in the sense that they can finance the implementation of all health efforts. needed.<sup>24</sup>

Facilities and infrastructure is one of the supporting factors in addition to human resources and funding. In the stunting prevention program, of course, the availability of adequate facilities and infrastructure along with optimal management and utilization can help achieve the success of a program. This study uses two components in describing the indicators of facilities and infrastructure in the stunting prevention program during the Covid-19 pandemic. The two components are availability and constraints.<sup>25</sup>

All key informants stated that the availability of infrastructure at all puskesmas was complete including body scales (stepping scales for adults and baby scales), measuring instrument for infant body length, microtoise to measure height, measuring tape/metline to measure head circumference, arm circumference, waist and hip circumference. Regarding the availability of infrastructure facilities in the posyandu area, two of the five main informants stated that the availability of infrastructure facilities at the posyandu was not evenly distributed, especially anthropometric tools between one region and another. Meanwhile, the two main informants confirmed by triangulation informants stated that some anthropometric tools were damaged and unfit for use.<sup>13</sup>

This, of course, must be given more attention because the implementation of the nutrition program is determined by the nutritional infrastructure, especially the anthropometric tool used as a measuring tool for the growth and development of children under five.

From the results of the interview, the reason for not being able to check and collect data related to damaged anthropometric tools is due to limited access during the pandemic, especially in August where the city of Semarang carried out PPKM. Checking and calibrating nutritional measuring instruments at the posyandu can minimize calculation errors that have an impact on achieving the objectives of monitoring activities for children under five.<sup>101</sup>

In addition, the use of tools that are not appropriate or according to procedures can cause errors in weighing data that affect the stunting program. This is in accordance with Rusdiarti's research that errors in the use of nutritional measuring tools at the posyandu that are not appropriate, result in incorrect data, which has an impact on errors in making programs and policies related to nutrition programs.<sup>26</sup>

3. Input aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

The implementation of each activity was as follows:

a. Monitoring and tracking activities.

The purposes of monitoring and tracking toddlers were to obtain fast and accurate information on stunting cases, found and treated all stunted toddlers and all stunted toddlers received treatment according to stunting management so that they can suppressed and reduced the stunting prevalence. The target of tracking stunting toddlers was for 100 percent of toddlers in the working area of the puskesmas to track stunted toddlers.

During the Covid-19 pandemic, monitoring and tracking activities are carried out door to door. During the Covid-19 pandemic, tracking of toddlers was carried out by door to door or house-to-house visits of mothers and toddlers by posyandu cadres. Tracking activities are carried out once a week or 3 times a month. After tracking in the form of anthropometric measurements, namely WAZ (Weight for Age Score), HAZ (Height for Age Z-scores), and WHZ (weight for height Z-scores). After monitoring by posyandu cadres, the data is submitted to nutrition workers for checking. If a stunting toddler is found with a z score of less than -2SD, direct monitoring by nutrition workers and posyandu cadres is carried out door to door. If the area is a stunting locus area, then monitoring activities are also assisted by DKK through the Nutrimas program.

While the drawback is that some toddlers are sleeping when visited, so monitoring is difficult to carry out, in addition to the effort and energy spent by posyandu cadres, which has the potential to decrease performance which has an impact on the quality of monitoring and tracking activities.

This was in accordance with Didah's research which states that the heavy workload of posyandu cadres can reduced the achievement result of a program implementation in posyandu.<sup>27</sup>

b. PMT giving activities.

The provision of supplementary food (PMT) for stunted toddlers at the puskesmas used the Recovery PMT and the F100 package with the aim of improving the nutritional status of these toddlers.

The target in giving PMT is the distribution of PMT to all toddlers, especially toddlers with stunting and to have an impact on the community to have the habit of giving toddlers a healthy diet. During the Covid-19 pandemic, only PMT recovery without PMT F100 was given to toddlers who were stunted.

During the Covid-19 pandemic, the provision of PMT for stunting toddlers in the form of recovery PMT and F100 packages was given from the puskesmas, namely nutrition workers to posyandu cadres, to be handed over to mothers with stunting toddlers.

The administration of PMT during the Covid-19 pandemic was the absence of the F100 package for stunted toddlers. According to Kholidah's research, the F100 administration program regularly can reduce.<sup>28</sup>

c. Stunting Counseling

The purpose of health education about stunting was to achieve changes in the behavior of individuals, families and communities related to awareness of stunting prevention, to played an active role in realizing optimal health for infants and toddlers according to healthy living.

During the Covid-19 pandemic, due to the prohibition on access to posyandu, stunting counseling was carried out online. Online stunting counseling is carried out through the WA group with participants from pregnant women, mothers who have toddlers, both stunted and non-stunted. Online counseling is held at least once a month, with nutritionists, health promotion personnel and MCH conducted through group chats or group video calls.

Obstacle in stunting counseling program regularly via online was : participants who do not have quotas and cellphones that meet the minimum specifications cannot participate in counseling activities. This was in line with Fakhriyah's research which states that the problem with online health lectures in WA is that mothers of toddlers do not have quotas and do not have the WA application.<sup>29</sup>

Extension activities are not flexible because one group is filled by several puskesmas officers and have different interests, so that there is the potential that the messages conveyed are conflicting and ineffective.

d. Counseling



The purpose of counseling services was to alleviate the problems experienced by clients. In this case, the client meant pregnant women, mothers who have toddlers, especially mothers who have stunted toddlers. The target to be achieved in nutritional counseling was for mothers to know their nutritional needs and adequacy according to age so that the pattern of giving food was appropriate.

Nutrition counseling is the only activity that has not undergone major changes in the stunting prevention program during the Covid-19 pandemic. This is because the activity is carried out at the puskesmas. A different change from the period before the pandemic was the absence of gifts from posyandu cadres for those who came for consultations.

Although there is no difference before the pandemic and after the pandemic in the stunting program, there are various obstacles that are experienced only during the pandemic, namely the decrease in consultation visits to the puskesmas. One of the causes of the decline in visits to puskesmas is public perception of health services during the Covid-19 period. Public perception affects visits to health care facilities.<sup>30</sup> The Covid-19 pandemic has made the public's negative perception of health services increase.<sup>31</sup> In addition, the absence of a stimulus in the form of PMT made by posyandu cadres makes mothers who have toddlers not visit the puskesmas.

e. Giving Vitamin A

The purpose of vitamin supplementation administration was to make the child's body to be healthy. In particular, the consumption of vitamin A for toddlers has benefits such as: Increasing the body's resistance to diseases and infections such as measles and diarrhea. Assisted the process of vision in adapting light to dark places. Prevented abnormalities in epithelial cells, including the mucous membranes of the eyes.<sup>32</sup>

The target for the provision of vitamins and minerals is that all toddlers get 100 percent at least vitamin A.

During the Covid-19 pandemic, the vitamin and mineral provision which was usually carried out at the posyandu turned into a door-to-door provision of vitamins and minerals due to the prohibition of access to posyandu.

The obstacle experienced during the pandemic was that the administration of vitamin A directly to toddlers was not monitored because it was different from the administration of vitamin A at the posyandu which could be monitored in taking it, the administration of vitamin A during the pandemic was carried out door to door so that it was not possible to carry out further monitoring.

4. Output aspects of the stunting program implementation during the Covid 19 pandemic in Semarang City.

So it can be concluded that the nutritionist as the coordinator of the stunting prevention program conducts regular evaluations once a year. In addition to evaluating, nutrition workers also conduct assessments. Assessment is a process to determine the value or level of success of a program in achieving the goals that have been set or an orderly and systematic process in comparing the results achieved with the benchmark criteria set, followed by drawing conclusions and providing suggestions and input that can be done at each stage. stage of program implementation. Without an evaluation it will be difficult to know how far the planned goals will be achieved.<sup>33</sup>

The main objective of the stunting prevention program during the Covid-19 pandemic was to reduce the stunting rate during the Covid-19 pandemic, which during the current COVID-19 pandemic had the potential for a spike in cases due to limited access and quality of the stunting program itself.<sup>6</sup> Therefore, to find out about the success of the stunting program objectives in general, it can be seen from the status of stunting prevalence in the city of Semarang.

Based on data from the Semarang City Health Office, the prevalence of stunting in the pre-pandemic period was 2.5% in 2018 and 2.57% in 2019 while the prevalence of stunting during the pandemic taken from 2020 data was 3.13% or as many as 3143 infants and toddlers were stunted. It can be concluded that the stunting program during the pandemic has not met the expected target where there is an increase in stunting cases from 2.57% to 3.13% with the total number of toddlers experiencing stunting during the pandemic, an increase of 384 toddlers compared to before the pandemic. This certainly needs special attention, especially in improving the quality of the quality of a program. The success of the stunting prevention program during a pandemic must be in line with the declining prevalence rate during the pandemic.

## CONCLUSION

The stunting prevention program in the work area of the puskesmas during the Covid-19 pandemic has not been able to be implemented well during the Covid-19 pandemic. The input aspect proved this; the process has not run well, thus increasing the stunting prevalence rate from 2.57% to 3.13%. The number of toddlers experiencing stunting during the pandemic increased by 384 toddlers. The suggestion in this study is to increase the innovation of stunting prevention programs by using digital technology during the pandemic.

This research is cannot be separated from the limitations and weaknesses in the data collection process. Limitations and weaknesses in this research include: The limited time of the informants to conduct in-depth interviews due to the busyness of the informants at work, so that the information obtained was not maximized, The limitations of researchers to make observations through observing the available infrastructure at the posyandu (Integrated Healthcare Center) due to restrictions during the pandemic Covid-19.

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