First 1000 Days of Life Education for Cadres at the Work Area Health Center in Sambikerep District, Surabaya

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ABSTRACT

The First 1000 Days of Life Movement (HPK) is also known as Scaling Up Nutrition (SUN) as a state effort to accelerate nutrition improvement, especially handling nutrition from 1000 days from pregnancy to two years of age. Pregnant women, nursing mothers, newborns and children under two years of age (baduta) are the target groups to improve the quality of life for the first 1000 days of humanity. For cadres as the spearhead of health workers who are directly involved with the community, there is still a low level of knowledge of cadres from an academic and technical perspective regarding the implementation of Posyandu. Providing 1000 HPK education is expected to be able to carry out posyandu activities optimally on target. The 1000 HPK cadre education activities showed an increase in scores for general knowledge of posyandu cadres, attitudes and actions of cadres and knowledge of balanced nutrition. The knowledge that the respondents had before being given education & training was good, this is probably due to the age characteristics that are in the range of 30-40 and the education of the respondents who graduated from high school allows the respondents to have good knowledge.

KEYWORDS
Cadre Education;
1000HPK;
Sambikerep Health Center Area;
Surabaya

1. Introduction

East Java Province is one of the provinces in Indonesia which consists of 7,724 villages, 777 sub-districts and 664 sub-districts spread across 29 districts and 9 cities. One of the cities in East Java Province is the City of Surabaya. In the city of Surabaya there are as many as 154 sub-districts spread over 31 sub-districts, and one of them is the Sambikerep sub-district which consists of 4 sub-districts, namely Bringin, Made, Lontar and Sambikerep. In the working area of the Sambikerep sub-district there are 2 health centers, namely:

1. Made Health Center, with address: Jl. Raya Made, Kec. Sambikerep, Surabaya, East Java, type of Puskesmas: Non-Inpatient. The Made Health Center provides health service facilities for the community in the Made and Beringin sub-districts.
2. Lontar Health Center, with address: Jl. Raya Lontar No. 26, district. Sambikerep, Surabaya, East Java, type of Puskesmas: Non-Inpatient. The Lontar Health Center provides health service facilities for people in the Lontar and Sambikerep sub-districts.

One of the government's health programs nationally is the 1000 HPK movement known as Scaling Up Nutrition (SUN) which is a variety of state efforts to strengthen commitments and action plans to accelerate nutrition improvement, especially handling nutrition from 1000 days from pregnancy to two years of age [1]. Pregnant women, nursing mothers, newborns and children under two years old (baduta) are the target group to improve the quality of life for the first 1000 days of humans, which starts from conception until the child is 2 years old [2]. The thousand days consist of, 270 days during pregnancy and 730 days of the first life since the baby is born [3]. This period is called the golden period or also known as the critical time, which if not utilized properly will result in permanent damage (window of

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opportunity) [4]. Malnutrition in the first 1000 days of life cannot be corrected in later life [5]. The consequences that occur if the baby does not get enough nutrition it needs in this golden period are:

- Brain growth is stunted, children are not smart [6], [7].
- The child's physical growth and developmental abilities are stunted, and the child becomes stunted [8], [9]
- Children become weak and get sick easily [10], [11].
- It will be difficult for children to follow lessons when they go to school [12], [13].
- After adulthood it will be difficult to get a job or do a job with good income as he wants [14], [15].

Cadres are the spearhead of health workers because they are directly involved with the community and are expected to be able to provide information to prospective brides, pregnant and lactating women and mothers of toddlers regarding 1000 HPK [16]. Cadres are expected to play an active role and be able to become a motivator, motivator and community educator [17]. Cadres are expected to be able to bridge between health workers/experts and the community and help the community identify and deal with/respond to their own health needs [18].

The most basic and commonly found Posyandu problem is the low level of knowledge of cadres from both an academic and technical standpoint [19]. In order to obtain optimal service at the posyandu, it is necessary to adjust the knowledge and skills of cadres, so that they are able to carry out posyandu activities optimally on target [20]. Cadres can assist the community in identifying problems related to the nutritional status of infants and toddlers in the 1000 HPK period. Cadres together with the community can explore potential according to local wisdom, in overcoming nutritional status problems in infants, toddlers in the 1000 HPK period such as stunting and wasting incidents. Therefore, cadres must have good knowledge so that technical tasks in the field with the community can be carried out properly, especially knowledge about 1000 HPK [21][22].

Providing health education about 1000 HPK by health workers, or health cadres is very important to do [23][22], [24]. It is hoped that by providing health education in the form of counseling at posyandu or mother classes or toddler mothers classes, it will be able to increase knowledge about fulfilling nutrition in the womb, child nutrition (ASI and MPASI) in the 1000 HPK period which will be useful for accelerating growth and development of children from childhood pregnancy up to the first 2 years after birth [25].

Skills that must be possessed by cadres in achieving 1000 HPK include carrying out posyandu (identification & activities), filling out the Towards Health Card (KMS), SKDN, exclusive breastfeeding immunization. SKDN is the result of weighing children under five which is carried out every month in the form of a simple histogram. Service indicators at Posyandu or at the Toddler Weighing Post use SKDN indicators [26].

- S is the total number of children under five in the posyandu working area.
- K is the number of children under five in the posyandu working area who have a KMS (Healthy Towards Card).
- D is the number of children under five who come to the posyandu or have a home visit and are weighed accordingly or the total number of children under five weighed.
- N is the number of children whose weight has increased compared to the previous month using the growth line

The purpose of the training is to increase certain knowledge and skills so that participants become more skilled and able to carry out their responsibilities properly according to the standards through a series of systematic procedures carried out by an expert with the aim of increasing the skills and knowledge of the participants [26]–[30].

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2. Method

2.1. Preparatory activities

a. Coordination of the Nutrition Department of the Ministry of Health Surabaya Polytechnic with the Community Health Centers in the Sambikerep District working area regarding: preparation for the implementation of activities

b. Setting the target for Cadres of 1000 HPK

c. Student Training as 1000 HPK Program Facilitators

d. Preparation of counseling materials, and other supporting material activities

2.2. Main activity

a. Education and Training for 1000 HPK Cadres with the following materials:

1) Provision of supplementary food, iron, vitamin A, balanced nutrition
2) Posyandu (identification & activities), Health Card (KMS), SKDN, immunization and exclusive breastfeeding

b. Cadre guidance in implementing the 1000 HPK program

c. Evaluation of Cadre knowledge

3. Results and Discussion

Education for 1,000 HPK cadres in the working area of Sambikerep sub-district, Surabaya, attended by 52 cadres from 4 urban villages, was carried out under the following mechanism:

1. Pretest
2. Education and refreshment of 1000 HPK material for 2 times, with the topic:

- Provision of supplementary food, iron, vitamin A, balanced nutrition
- Posyandu (identification & activities), Health Card (KMS), SKDN, immunization and exclusive breastfeeding

3. Post test

In the description of the pre and post test questions, to evaluate the performance of cadres, the following parameters are used:

1. General knowledge of posyandu cadres, including: sequence of implementation stages at posyandu, posyandu goals, KMS cards, posyandu classifications (pratama, middle, full moon and independent), immunization, exclusive breastfeeding, pregnant women and family planning
2. Attitudes and actions of cadres, if there is a case:
   a. The toddler's weight is not increasing, the toddler's weight is below the red line (BGM)
   b. The system for recording & reporting the results of weighing toddlers is lacking
   c. The interest of posyandu participants is reduced
   d. Participation of cadres if approaching the season of many weddings
3. Balanced nutrition, balanced nutritional composition, function of carbohydrates, proteins, minerals, vitamins and food sources, messages in balanced nutrition guidelines

The results of the 1000 HPK educational activities obtained data such as the number of cadres and the name of the posyandu in Sambikerep District as shown in Table 1

Table 1. Distribution of the frequency of respondents based on the number of cadres and the name of the posyandu in Sambikerep District.

Village Name	Number of Posyandu Cadre	Posyandu name
Beringin	6	Dahlia 1 - III
Lontar	17	Melati 1 -VII
Made	12	Mawar I – VI
Sambikerep	17	Bougenvile I - VII

From table 1 it can be seen that the majority of respondents came from the Lontar and Sambikerep sub-districts, this is related to the number of people living in these areas. If the characteristics of the respondents are grouped by age, education level, marital status, employment status of cadres in Sambikerep District, the data is obtained as shown in table 2 below:

Table 2. Characteristics of cadres in Sambikerep District

Category		Village Name			
		Beringin	Lontar	Made	Sambikerep
Cadre Age	30-40 year	2	6	9	8
	41-50 year	4	5	3	4
	51-60 year	0	5	0	4
	>60 year	0	1	0	1
Last educational level of cadres	Elementary school	0	0	1	3
	Junior high school	2	4	0	5
	Senior high school	4	13	10	8
	College	0	0	1	1
Marital status	Marry	6	17	12	17
	Not married	0	0	0	0
Staff employment status	Work	1	2	4	4
	Doesn't work	5	15	8	13

For knowledge about balanced nutrition, it has a good average and after education has been carried out through material refreshment for 2 times, the results can be seen in table 3

Table 3. Pre-post test results of posyandu general knowledge, attitudes and actions of cadres and knowledge of balanced nutrition

Village Name	The average score of posyandu cadres' general knowledge		The average score of attitudes and actions of cadres		The average score of knowledge about balanced nutrition	
	Pre	Post	Pre	Post	Pre	Post
Beringin	92	96	70	85	90	95
Lontar	80	85	57	80	84	90
Made	82	87	68	85	79	85
Sambikerep	85	90	62	82	83	87

If the results of the pre-test and post-test are compared, there is an increase in scores for the general knowledge of posyandu cadres, attitudes and actions of cadres and knowledge of balanced nutrition. The knowledge possessed by the respondents before being given education & training was good, considering the characteristics of the age and education of the respondents, it was possible for the respondents to have good knowledge. The same thing was also expressed by Imaniar (2022) which showed that there was an increase in the knowledge and skills of cadres in mastering 1000 HPK, after the cadres received KKN 1000 HPK training which was attended by 30 people for 2 days [13]. Sari

(2020), in his research, involved 58 community training participants, youth organizations, and health cadres in Gaji Demak Village, resulting in the result that health cadres have a very important role in improving the health status of the community in Gaji Demak village [14].

Cadres are Puskesmas assisted staff whose role is to make the community aware of the importance of maternal and child health. Jacob provides training for 2 weeks with the guidance of trained supervisors so that the cadres have tasks including being responsible for increasing the participation of mothers in attending group meetings at the posyandu. Jacob and team visited the expectant mother once in the 3rd trimester and followed up during delivery within 72 hours, 3, 6, 9, 12, 15 and 18 months of the child's age. Jacob and team followed standard procedures for measuring length/height, weight, and the upper middle with good results [15]. The same thing was also done by Hamidah that through effective training would improve the skills of cadres/public health workers in the practice of exclusive breastfeeding and stimulation of baby development [16]. Hamidah uses a model of support for women's religious organizations, consisting of training for community health cadres, training for breastfeeding mothers, and advocacy, effectively increasing mothers' skills in the practice of exclusive breastfeeding and infant stimulation [17]. Herarti research results, 2020 that health organizations responded by creating a Parenting Module to meet minimum standards for early childhood, an integrated holistic approach to development. This will help children with a strong start in life [18].

Explains that the level of education, knowledge, and attitudes of Posyandu counselors in infants and toddlers regarding the practice of counseling on child feeding are important factors that can improve children's nutritional status [19]. This is supported by Labiba 2021 with findings which illustrate that around ten pregnant or breastfeeding women participate in each activity session making it easy for mothers to understand the information provided through the media of games delivered in simple language and can be applied in daily child care . The Fun for Mom program carried out by Labiba deserves to be called an effort to empower the community in the Puskesmas environment and can be developed further [20]. Martha 2020, delivered the Follow-up Plan for the results of the training, to involve the community in the form of campaigns and education for cadres and other mothers during activities at posyandu, Islamic study forums, village activities, sports activities, as well as visits to every family and neighbor, etc. Empowering health cadres and workers through education early on to detect and prevent stunting can meet expectations and be quite effective in encouraging cadres and health workers in the community [21].

The results of Sari's research, 2021 with bivariate analysis showed that toddlers who lack family support have a higher risk of experiencing underweight (0.04), stunting (0.28) and wasting (0.30), in addition, toddlers who receive less attention of cadres, health workers and families have a higher risk of experiencing underweight (0.36), stunting (0.43), and wasting (0.42). Sari concluded that the nutritional status of children under five (underweight, stunting, and wasting) was indirectly influenced by family support and the partnership of cadres of family health workers [22].

Sugiyanto 2020 states that the Balanced Nutrition Program in the Bantilang Health Center work area has been implemented but has not run optimally due to several obstacles including the limited participation of the community and local government, so it is necessary to monitor and evaluate the implementation of the Balanced Nutrition Program by the East Luwu District Health Office [23]. The results of Sriyanti's research (2019) show that from the results of assisting health students to the group of mothers who provide exclusive breastfeeding, it is 76.7%, while in the group of mothers who do not receive assistance, only 53.5% of mothers provide exclusive breastfeeding, so there is a significant relationship between mentoring and exclusive breastfeeding ($p = 0.020$). Sriyanti concluded that the assistance of siself-health is effective in increasing exclusive breastfeeding for babies under two years of age, but it is still necessary to strengthen the education office that cross-sector assistance is very good in improving public health [24]. Basu's research (2019) states that good results are obtained when monitoring the health of mothers and toddlers by involving trained health workers who provide non-communicable disease screening services at home [25]. Kurniavie (2020) states that the performance of cadres on toddler growth and development is influenced by cadre education, cadre work, cadre knowledge, cadre attitudes, growth and development training, years of service, posyandu facilities and infrastructure, community support, and village government support [26]. Apart from the factors above, Wahid (2019) stated that culture is one of the most influential aspects in feeding children. The culture embraced by parents and society can affect children's nutritional intake, especially in the first 1000 days

of life [27]. Handayani (2021) involves Nasyiatul Aisyiyah cadres to actively prevent stunting by having the Rumah Gizi and Fatayat NU programs increasing the involvement of community leaders in advocacy, communication, information, and education about family planning or what is known as the Bangga Kencana program, yielding significant good results [28]. Vallières (2018) states that surveillance is the first validated tool to measure supervisory experience from a cadre's perspective and applies in a variety of culturally different global health contexts with various typologies of cadres [29]. Afzal (2021) states that it is very important to integrate cadre initiatives into the formal health system. Multidimensional interventions and multisectoral partnerships are needed to address challenges at the national and local levels holistically, thus ensuring synergies between the actions of partners and stakeholders [30]. To build a robust and institutionalized process, coordination is required to provide a workable platform and an enabling environment, engaging all partners and stakeholders to produce tangible results.

4. Conclusion

Community service activities at the Community Health Center in the Sambikerep Sub-District, Surabaya, concluded that education for 1,000 HPK cadres effectively increased scores for posyandu cadres' general knowledge, attitudes and actions of cadres and knowledge of balanced nutrition, so that pregnant women and children under 2 years of age would be better monitored along with the 1000 HPK program launched by the government.

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Author Contribution

The activity plan in order to implement first 1000 days of life education for cadres at the work area health center in sambikerep district, Surabaya.

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Conflict of Interest

The authors declare no conflict of interest.

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