

# EFFECTIVENESS OF FORMING BREASTFEEDING SUPPORT GROUP PROGRAM TO IMPROVE EXCLUSIVE BREASTFEEDING

*Efektivitas Pembentukan Program Kelompok Pendukung ASI untuk Meningkatkan ASI Eksklusif*

\*Dewi Roudhotul Hasanah<sup>1</sup>, Nuzulul Kusuma Putri<sup>1</sup>, Andini Yulina Pramono<sup>2</sup>

<sup>1</sup>Faculty of Public Health, Universitas Airlangga, Indonesia

<sup>2</sup>College of Health and Medicine, Australia National University, Australia

\*Correspondence: dewi.roudhotul.hasanah-2015@fkm.unair.ac.id

## ABSTRACT

**Background:** Exclusive breastfeeding is a problem of maternal and child health in Indonesia. With Breastfeeding Support Group, exclusive breastfeeding is expected to improve. Sugihwaras Village and Sumbergede Village have been initiating Breastfeeding Support Group program. However, the framework of Breastfeeding Support Group program and intervention methods for pregnant and breastfeeding mothers in both villages were different.

**Aim:** It analyzed the effectiveness of forming Breastfeeding Support Group program and intervention programs for pregnant and breastfeeding mothers to improve exclusive breastfeeding in Sugihwaras Village and Sumbergede Village.

**Methods:** This study used a case study approach to the formation of Breastfeeding Support Group program. Comparative analysis was done descriptively by selecting samples from the Fieldwork Report of Group 14 and 15 in the period of 2017/2018, Faculty of Public Health, Universitas Airlangga. This study applied total sampling technique and descriptive analysis by comparing community's characteristics (as input), a form of intervention and program management (as a process), and results of evaluating the formation of Breastfeeding Support Group (as an output).

**Results:** Community's characteristics in both villages tend to be similar, and the average duration of each program was the same. Sumbergede Village focused on the readiness of forming cadres for Breastfeeding Support Group program, while Sugihwaras Village focused on breastfeeding mothers and their husbands. Indicator analysis of the program showed that Sumbergede Village (80.00% achieved) had a 5.71% higher percentage of attainment compared to Sugihwaras Village (85.71% achieved). Analysis of the program's strengths and weaknesses pointed out that Sumbergede Village had more values and power in resources in its region.

**Conclusion:** The intervention program in Sumbergede Village tends to be more effective. It has greater potential to be a sustainable program in the following year to improve 100% exclusive breastfeeding.

**Keywords:** Breastfeeding Support Group, exclusive breastfeeding, intervention, effectiveness.

## ABSTRAK

**Latar Belakang:** ASI Eksklusif merupakan isu kesehatan ibu dan anak di Indonesia. Dengan Kelompok Pendukung ASI (KP-ASI), ASI eksklusif diharapkan dapat ditingkatkan. Desa Sugihwaras dan Desa Sumbergede merupakan dua desa yang sedang mewujudkan program KP-ASI. Namun, perumusan program pembentukan KP-ASI dan bentuk atau metode pemberian intervensi pada ibu hamil dan ibu menyusui di kedua desa tersebut berbeda.

**Tujuan:** Untuk menganalisis keefektifan program pembentukan KP-ASI dan pelaksanaan program intervensi pada ibu hamil dan menyusui dalam meningkatkan perilaku ASI Eksklusif di Desa Sugihwaras dan Sumbergede.

**Metode:** Penelitian ini menggunakan pendekatan studi case terhadap dua program pembentukan KP-ASI. Analisis perbandingan dilakukan secara deskriptif dengan pengambilan sampel dari data Laporan Praktik Kerja Lapangan (PKL) Kelompok 14 dan 15 Tahun Akademik 2017/2018, Fakultas Kesehatan Masyarakat, Universitas Airlangga. Penelitian ini menggunakan teknik total sampling dan . Teknis analisis yang digunakan yakni analisis deskriptif dengan membandingkan karakteristik masyarakat (input), bentuk intervensi dan pengelolaan program (proses), dan hasil evaluasi pembentukan KP-ASI (output).

**Hasil:** Karakteristik masyarakat cenderung sama, dan rata-rata durasi program kedua desa sama. Desa Sumbergede berfokus pada kesiapan program pembentukan kader KP-ASI, Desa Sugihwaras berfokus pada ibu menyusui dan suami. Analisis indikator keberhasilan program menyatakan Desa Sumbergede memiliki persentase ketercapaian 5,71% lebih tinggi. Analisis kelebihan dan kekurangan program menyatakan Desa

---

*Sumbergede memiliki nilai lebih dan memiliki keunggulan pada sumber daya di wilayahnya.*

**Kesimpulan:** Program intervensi di Desa Sumbergede cenderung lebih efektif. Program intervensi tersebut memiliki potensi yang lebih besar untuk menjadi program yang berkelanjutan pada tahun berikutnya untuk meningkatkan 100% ASI Eksklusif.

**Kata kunci:** Kelompok Pendukung ASI, ASI Eksklusif, intervensi, efektivitas.

---

**Received: 10 November 2018**

**Accepted: 11 November 2019**

**Published: filled by admin**

---

## INTRODUCTION

In achieving the second goal of SDGs (Sustainable Development Goals) aimed to end hunger, achieve better food security and nutrition as well as sustainable agriculture, health sectors must ensure that babies have access to safe, nutritious, and sufficient food all year around. This goal has been embedded in The First 1000 Days of Life program. The First 1000 Days of Life program is a golden age period often also referring as a window of opportunities (Cusick and Georgieff, no date). In this period, the rapid growth occurs and does not occur in other age groups. Therefore, fulfilling nutrition for babies and mothers needs special attention. Giving nutrition for babies is in the forms of exclusive breastfeeding because babies only need that in the golden age period (Indonesian Republic Government, 2012).

Exclusive breastfeeding is giving breastmilk to infants since 6-month old without adding and/or changing with other foods or drinks. The Indonesian Healthy Family Approach in 2016 compiled by the Ministry of Health stated that exclusive breastfeeding (age of 0-6 months) for infants is one indicator of healthy families. The World Health Organization recommends that all infants must be exclusively breastfed from 0 months to 6 months of age. After that, they must receive supplemental foods, but continuously get breastfed for at least two years (Indonesian Ministry of Health, 2016). One of the current Healthy People 2020 goals is to increase the proportion of infants who have ever been breastfed into

81.9% as a part of the Maternal, Infant, and Child Healthy goals (Healthy People 2020, 2014). Another objective is to increase the proportion of six-month breastfed infants to 60.6% (Silbert-Flagg, Balbier and Blakey, 2016).

The global study of Lancet Breastfeeding Series in 2016 proved that exclusive breastfeeding can decrease the number of deaths due to infections in infants under three months old by 88%. It also showed that a total of 31.36% of 37.94% of children were sick because they did not accept exclusive breastfeeding (Hajeebhoy, 2016). However, the need for breastfeeding in several regions in Indonesia has not been fulfilled yet. Bojonegoro District Health Profile Data in 2017 showed that the exclusive breastfeeding coverage decreased from previous two years, which were 89.4% in 2015 and 88.2% in 2016. Likewise, Nglumber Primary Healthcare Center in Kepoh Baru Sub-district only reached 70.3% (Bojonegoro District Health Office, 2017). Nglumber Primary Healthcare Center is the first-level primary health facility. This institution is responsible for public health in its working areas including two villages that have not reached 100% of the exclusive breastfeeding coverage. The villages are Sumbergede Village and Sugihwaras Village, which are 2 of 25 villages in the adjacent of Kepoh Baru Sub-district. Sugihwaras Village is located in the East part of Sumbergede Village.

Unachieved exclusive breastfeeding in the two villages come from internal factors or external factors. The internal factors consist of knowledge, education, employment, and socio-economic

conditions of breastfeeding mothers. While, the external factors are the availability of healthcare facilities, work environment, groups or communities, and family as one of the closest to breastfeeding mothers. Family factor tends to be overlooked in this case (Februhartanty *et al.*, 2012). It is a motivation for nursing mothers. Verbal support and physical support (assistance) during breastfeeding determine the success of exclusive breastfeeding. Forms of motivation given by family, especially husbands both verbally and physically will affect mothers' psychology and foster a sense of self-confidence. Thus, breastfeeding mothers are more enthusiastic and more consistent in giving exclusive breastfeeding to their babies. Nevertheless, the source of motivation cannot just come from family because the environment of breastfeeding mothers indirectly becomes a determining factor for the success of exclusive breastfeeding (Raffle *et al.*, 2011).

Breast Feeding Support Group is well-known as one of the 10 steps to successful breastfeeding in national and international level (World Health Organization, 2019). Breastfeeding Support Group is a group formed of 6-12 pregnant women and mothers who meet regularly in home visits. It aims to exchange experiences, discuss and provide mutual support related to maternal and child health, especially pregnancy, breastfeeding and nutritional fulfillment. Breastfeeding Support Group was carried out specifically for mothers who want to successfully breastfeed their infants in the early breastfeeding initiation and six-month exclusive breastfeeding. It also continues to provide more than two years of breastfeeding with nutritious complementary foods. Indonesian Ministry of Women Empowerment and Child Protection Regulation stated that Breastfeeding Support Group is a group

formed by community health facilities to support pregnant women, new mothers and caregivers. Breastfeeding Support Group members in the smallest scope consist of breastfeeding mothers, husbands, families, community leaders, and religious leaders. While, Breastfeeding Support Group members in healthcare facilities involve health workers inspite of breastfeeding mothers, husbands, families, community leaders, and religious leaders (The Ministry of Women Empowerment and Child Protection, 2010).

Breastfeeding Support Group is vital because mothers have a sense of being supported, loved, and cared about. There will be positive emotions that will increase their oxytocin hormone so that breast milk production will work smoothly. Breastfeeding Support Group makes pregnant women have confidence to breastfeed (Yunianti, Rofi'ah, and Rubiyanti, 2017). Breastfeeding mothers can get support and also learn from the experiences of other breastfeeding mothers, thus babies will get the best food/nutrition from the beginning. Husbands and family members also need to support the success of breastfeeding, and health workers can maintain breastfeeding stages by involving Breastfeeding Support Group members (Yunianti, Rofi'ah, and Rubiyanti, 2017).

Activities in Breastfeeding Support Group provide more opportunities for breastfeeding mothers to actively participate in the health promotion and health education. Education is not only activity with one-way learning method, such as counseling, workshop, and distribution of leaflets, but also sharing forums. Therefore, participants can also convey an obstacle in giving exclusive breastfeeding. Sharing forums are more likely to enrich information transfer, both knowledge and experience of each participant in the forum. Hence,

breastfeeding mothers can get advice for their obstacles and constraints.

The study about the Breastfeeding Support Group at Wonoayu Primary Healthcare Center in Sidoarjo City found that mothers who participated in Breastfeeding Support Group had an opportunity to provide exclusive breastfeeding at 3.701 times compared to mothers who did not participate (Wati and Muniroh, 2018). There is a significant relationship at 72.4% between participation of breastfeeding mothers in the Breastfeeding Support Group and success of exclusive breastfeeding for infants aged 6-9 months in Working Area II of Bantul under Kasihan Primary Healthcare Center (Purwanti, 2015). Then, based on research conducted by Nurrohmah, Prawitasari, and Nisman (2015) showed that the role of Mother Support Group significantly affects exclusive breastfeeding behavior. Women who take a part in the Mother Support Group have 12.85 times higher chance of doing exclusive breastfeeding than women who did not participate. Possible contributions from husbands' support and social support affect exclusive breastfeeding behavior (Nurrohmah, Prawitasari, and Nisman, 2015).

In line with the research, Sugihwaras and Sumbergede Villages have created a program involving Breastfeeding Support Group that aims to increase mothers' motivation during breastfeeding for infants aged 0-6 months. Although they have the same type of problems and causal factors, the forms of intervention provided do not need to be the same. The selection of interventions provided is determined by considering local culture, the capabilities of the community, the capacity of those who support Breastfeeding Support Group, the availability of supporting facilities, and other factors.

People responsible for conducting the Breastfeeding Support Group are

midwives in each village. Technically, it was planned that midwives will be assisted by Breastfeeding Support Group volunteers. Volunteer recruitment and intervention have been formulated by Sugihwaras Village and Sumbergede Village. Breastfeeding Support Group used different methods and were discussed further in this study. Therefore, this study aimed to compare which forms of interventions or programs are more effective and have potentials to continue in the following year. The results of this study were expected to be suggestions and considerations in decision-making for villages that have problems with the same community's characteristics as the community of Sugihwaras Village and Sumbergede Village.

## METHOD

This study used a case study approach to Breastfeeding Support Group programs. It compared interventions in the forms of education and action program to potential community. These interventions were aimed to maintain Breastfeeding Support Group which is expected to improve exclusive breastfeeding behavior.

The sample used was the community of two villages in Kepoh Baru Sub-district, Bojonegoro District (Sugihwaras Village and Sumbergede Village). The sampling was taken from the data of Field Work Report of Group 15 and 14. The report were compiled by students with Academic Year 2017/2018 from Faculty of Public Health, Universitas Airlangga. The inclusion criteria in this study were Breastfeeding Support Group members, varying from breastfeeding mothers who have infant aged <2 years, volunteers, community leaders, and village government. The selected sample size used total sampling. Totally, there were 74 samples from both villages.

The technical analysis used was descriptive analysis by comparing community's characteristics (as input), the forms of intervention or program (as a process), and the attainment of the program's success (as an output). Community's characteristics and forms of intervention were independent variables, while the effectiveness of Breastfeeding Support Group program was a dependent variable. To simplify the analysis, Sugihwaras Village was coded as Group A, while Sumbergede Village was assigned as Group B. The potential sustainability of Breastfeeding Support Group formation can be concluded based on the most effective analysis. Indicators that determine the effectiveness of the program can be obtained by calculating the percentage of success based on the evaluation of each intervention or programs and compare the strengths and weaknesses of each program.

## RESULTS AND DISCUSSION

### Community's Characteristics

Sugihwaras Village and Sumbergede Village are two adjoining villages. Hence, they have relatively similar community's characteristics, in terms of education, work, culture, even health status and health problems. Understanding community's characteristics is essential and must be carried out by each researcher to observe the intervention. It aimed to find out community's condition, capacity, strength, values, and norms in the targeted areas. The comparison of community's characteristics between Group A and Group B is shown in Table 1.

In terms of education level, it indicated that more than 50% of respondents have a junior high school or high school certificate. This means the level of education in Group A and Group B is still relatively low because only less than

11% of the community have graduated from Higher Education.

The analysis of community's characteristics viewed from types of work in the two groups shows that most people become farmers, farm laborers and employees of private companies. It means the economic level of the community is still classified into a middle economic level. Whereas, based on gender, the number of men and women is 50%: 50%.

A study stated that sociodemographic and psycho-social characteristics positively influenced the duration of breastfeeding. These characteristics include time when the decision to breastfeed was made, intended duration of breastfeeding, household income, and smoking habit during pregnancy. Mothers who more often attended Breastfeeding Support Group will continue breastfeeding for at least six months if they decide to breastfeed after birth. Mothers are expected to breastfeed for longer than six months, have higher monthly household income and do not smoke during pregnancy (Bosnjak *et al.*, 2009).

### Analysis of Intervention Programs

Promotion/education/counseling has often been done but cannot improve the exclusive breastfeeding coverage. While an increase in knowledge is not enough to change behavior, breastfeeding mothers need skills and supports to give them trust, acceptance, recognition, and appreciation from other peers. The mutual support is more easily shaped into peer groups with the same experience and environmental situation (Susilo, Kurdant, and Siswati, 2012). To provide a solution for not fulfilling the exclusive breastfeeding coverage, both team were assigned to Sugihwaras Village and Sumbergede Village, Kepoh Baru Sub-district, Bojonegoro District. Two programs involving the Breastfeeding Support Group



were created in different forms or concepts. Both programs in the two villages have in common, consisting of a series of activities in one program. Table 2 explains the analysis of program forms or concepts in both Group A and Group B.

The number of activities compared for both interventions was 4:3. It means that the intervention given to Group A was more intensive than to Group B. Group A conducted meeting for 4 times per month, while Group B met only 3 times. The average duration of activities in Group A is 2 hours 15 minutes. Meanwhile, Group B have an average duration of 2 hours 20 minutes. To conclude, the duration difference is at 5 minutes.

Interventions in both groups were designed through health promotion and education with the topic of exclusive breastfeeding. They have the same targets, which are pregnant and breastfeeding mothers and their husbands. However, the target of Group A come from volunteers on immunization who also play a role as Breastfeeding Support Group volunteers because there is no enough incentives for additional volunteers. Thus, the volunteers on immunization have double responsibility in escorting pregnant women and breastfeeding mothers.

Table 1. Comparative Analysis of Community's Characteristics in Group A and Group B.

Comparison Variables	(%)	
	Group A	Group B
Education level		
- Senior High School	31.36%	60.56%
- Junior High School	42.46%	17.91%
- Elementary School	17.76%	11.10%
- Others	8.42%	10.43%
Work type		
- Farmers	44.93%	33.13%
- Farm laborers	19.91%	13,00%
- Employees of private companies	12.51%	13.09%
- Small and medium level of enterprises	6.93%	00.00%
- Others	15.72%	4.62%
- Indeterminate work	00.00%	36.16%
Gender distribution		
- Men	49.00%	50.95%
- Women	50.67%	49.03%

Source: Field Work Practice Report (14&15 group) 2017/2018, Faculty of Public Health, Universitas Airlangga

Both groups have different concepts of activities. Group A conducted a workshop, while Group B held a talk show. Workshop is more scientific and more serious, while talkshow is more flexible and has a lot of discussion from speakers' experiences. They likewise have different duration of activities. Workshops conducted by Group A have richer information compared to talkshow. The

workshops cover a particular theory related to the benefits of exclusive breastfeeding, the ideal way of breastfeeding, the introduction of breastmilk pumps and a proper way to express breastmilk. The introduction of the breastmilk pump aims to provide alternatives for working mothers who breastfeed. Breastmilk pumps are given as rewards although the effectiveness of such

rewards is unproven. The use of breastmilk pumps increases in line with the high proportion of mothers who express breastmilk (Crossland *et al.*, 2016). Mothers who work often cause not to achieve exclusive breastfeeding coverage.

The success of information transfer in the activities was evaluated based on the results of the pre-test and post-test. Pre-test and post-test inform how much information the participants have obtained. The use of media for conducting activities in each group indicates that Group A are more skilled in delivering information to participants. Therefore, by using more varied media, participants tend to be more receptive to conveyed information. Concrete media provide a direct description to participants about the right implementation of the information. Thus, participants do not need to imagine how to implement the information into daily life. In Activity II, both groups used an individual approach through home visit.

Activities in the program involve families, the closest people to breastfeeding mothers, and community groups that influence motivation for breastfeeding. Although the names and concepts of activities II in each group are different, the activities have the same goal to enhance supports from the social environment around breastfeeding mothers. For example, they may increase mothers' self-confidence for full breastfeeding duration until their baby is 6 months old. In a study of *The Effect of Breastfeeding Exclusive Training on Knowledge Breastfeeding Support Groups*, there was a significant increase in mothers' knowledge ( $p < 0.05$ ) before and after training and formation of Breastfeeding Support Group in Mekargalih Village and Cipacing Village in Jatinangor Sub-district. Hence, the formation and training of Breastfeeding Support Group can encourage mothers to express exclusive breastfeeding (Sri, Judistiani and Indra, 2016).

Table 2. Analysis of Intervention Program in Group A and Group B.

Intervention Program	
Group A	Group B
Activity I "Be Ready to Exclusive Breastfeeding Village" Workshop ( <i>Workshop SIAP DESASI</i> ) <ul style="list-style-type: none"> <li>- Description: activities run by signing an approval petition of <i>SIAP DESASI</i> program, conducting pre-test and post-test, transfer of information, demonstration on ideal breastfeeding procedures, question-answer sessions</li> <li>- Target: pregnant women, breastfeeding mothers</li> <li>- Media: public service advertisements, baby mannequins, petition banner</li> <li>- Topic: exclusive breastfeeding, benefits of breastfeeding for mothers and babies, Breastfeeding Support Group, socialization of ideal breastfeeding procedures and breastmilk pumps</li> </ul>	Activity I Exclusive Breastfeeding Fun Talk show ( <i>Talk show TALK SIK ASIEK</i> ) <ul style="list-style-type: none"> <li>- Description: activities are in forms of talk show to socialize the importance of exclusive breastfeeding and share questions-answers with educational videos</li> <li>- Target: fertile Couples</li> <li>- Media: public service advertisements</li> <li>- Topic: exclusive breastfeeding, nutrition fulfillment for mothers, benefits of exclusive breastfeeding for fertile couples</li> <li>- Pre-test and Post-test (an increase of 18.75% in behavior)</li> <li>- Duration: 2 hours</li> <li>- Cost: IDR 484,000</li> </ul>

<b>Intervention Program</b>	
<b>Group A</b>	<b>Group B</b>
<ul style="list-style-type: none"> <li>- Pre-test and Post-test (a decrease of 8% in the high-value category)</li> <li>- Duration: 3 hours</li> <li>- Cost: IDR 1,193,500</li> </ul>	
<p><b>Activity II</b>            One Fun Day with Breastfeeding Support Group</p> <ul style="list-style-type: none"> <li>- Description: one-day session is done by reviewing previous workshops, giving a calendar to participants, and taking testimonial video</li> <li>- Target: breastfeeding mothers (with infants aged 0-6 months)</li> <li>- Media: electronic posters, exclusive breastfeeding calendar</li> <li>- Activities: socializing the roles of Breastfeeding Support Group, distributing calendars for checking the frequency of everyday breastfeeding, and taking video of declaration support</li> <li>- Method: home visit</li> <li>- Duration: 2 hours</li> <li>- Cost: IDR 750,000</li> </ul>	<p><b>Activity II</b>            Exclusive Breastfeeding Support Group Session I (<i>Keping/Kelompok Pendamping I</i>)</p> <ul style="list-style-type: none"> <li>- Description: activities are conducted by forming, assisting, and socializing exclusive breastfeeding volunteers</li> <li>- Targets: volunteers on immunization, candidates for exclusive breastfeeding volunteers, village government</li> <li>- Media: guidebooks, modules and pocketbooks about exclusive breastfeeding, letters of support from the Village Head (a form of commitment)</li> <li>- Activities: socializing Breastfeeding Support Group, forming a structure of exclusive breastfeeding volunteers, and writing letter of support for Breastfeeding Support Group program</li> <li>- Method: socialization and sharing</li> <li>- Duration: 2 hours</li> <li>- Cost: IDR 109,750</li> </ul>
<p><b>Activity III</b>            Monitoring and Evaluation</p> <ul style="list-style-type: none"> <li>- Description: activities are done by monitoring activity calendar (frequency of breastfeeding) and giving stickers as an appreciation</li> <li>- Target: breastfeeding mothers with babies aged 0-6 months</li> <li>- Media: exclusive breastfeeding stickers</li> <li>- Activities: monitoring checklist of breastfeeding frequency per day in a week on exclusive breastfeeding calendar, sharing obstacles of breastfeeding and support from the closest people, giving appreciation stickers to families who have successfully implemented exclusive</li> </ul>	<p><b>Activity III</b>            Exclusive Breastfeeding Support Group Session II (<i>Keping/Kelompok Pendamping II</i>)</p> <ul style="list-style-type: none"> <li>- Description: an activity to monitoring and evaluation with targeted volunteers and mothers by home visits</li> <li>- Targets: pregnant women in the second trimester and breastfeeding mothers with babies aged 0-6 months</li> <li>- Media: pocketbooks for exclusive breastfeeding</li> <li>- Activities: monitoring and controlling the frequency of breastfeeding and filling pocketbooks by Breastfeeding</li> </ul>



**Intervention Program**

<b>Group A</b>	<b>Group B</b>
breastfeeding for a week	Support Group volunteers
- Method: home visit	- Method: home visit
- Duration: 2 times a week for one week (2 hours per meeting)	- Duration: 3 hours
- Cost: IDR 50,000	- Cost: IDR 380,300

Source: Field Work Report 2017/2018 (Group 14 and Group 15), Faculty of Public Health, Universitas Airlangga

Activity II in Group B is more concrete because it directly involves representatives of the village government. To show support and commitment to the program, the Village Head needs to be present and sign a letter of agreement on recruiting exclusive breastfeeding volunteers and forming the management structure. In Group I, the Village Government takes a part in the activities, performing more positive value compared to Group II activities that only involve the community. The involvement of Village Government proves that they are aware of the health burden, which not only health workers but also the Village Government in the village need to solve. The Regulation of Indonesia Government Regulation No.33 of 2012 about Exclusive Breastfeeding obliges the Village Government to implement a national policy on exclusive breastfeeding, carry out an advocacy and socialization, provide technical training, foster, monitor, evaluate, and supervise the implementation of exclusive breastfeeding programs in health service facilities, health education units, workplaces, public facilities, and activities in the community. The Village Government assist to carry out the duties of District Government at the village level. Therefore, the Village Government is obliged to be committed in carrying out the national mission. Activity II in Group A only involves the main targets (breastfeeding mothers) and secondary targets (their families). The initiators of Breastfeeding Support Group transfer

information about family roles as motivators during breastfeeding period.

Besides, Group B utilize more information media for Activity II, such as a guidebook, module, and pocketbook for Exclusive Breastfeeding Support Group volunteers, as well as a letter of agreement on forming the structure of Exclusive Breastfeeding Support Group. Group A on Activity II only use two media, for example e-poster and exclusive breastfeeding calendar. In comparison with Group A, Activities II were better prepared in terms of consolidation with the Village Government, media, and Human Resources (HR) to form more structured Exclusive Breastfeeding Support Group volunteers. In spite of that, the media used by Group A are more creative and interesting for nursing mothers. Fauziyyah (2018) conducted a study on the effectiveness of using media to increase mothers' knowledge and attitude towards complementary food in Kenep Village Sukoharjo District. Similarly to the findings of this present study, it showed that there was an increase in maternal knowledge after nutrition education by distributing leaflets of 10.2%, pocketbooks of 10.3% and videos of 18%.

Suhertusi, Desmiwati and Nurjasmu (2015) found that respondents who watched health-promotion film had a higher average increase in personal knowledge than respondents who received leaflets ( $p=0.001$ ). In a nutshell, the success of information delivery is influenced by the right methods and media. Methods and media which convey

interesting sentences will affect the message delivery. Creative health-promotion media can illustrate abstract and difficult concepts to be more concrete (Suhertusi, Desmiwanti and Nurjismi, 2015).

In Group B, it is noticeable that they have Exclusive Breastfeeding Support Group volunteers and promoting materials to assist inclusive breastfeeding practices in Sumbergede Village. Exclusive Breastfeeding Support Group volunteers help health workers in the village. They are expected to accompany breastfeeding mothers intensively in Sumbergede Village. The structured human resources will facilitate to plan, organize, implement, and control activities. In line with the results, the establishment of Muhammadiyah Klaten Breastfeeding Support Group in 2015 performed strong and independent institutions, as well as conducted training for motivators who can transform awareness, commitment, willingness, knowledge, skills and affections to community members (Sutaryono and Purwaningsih, 2015).

Exclusive Breastfeeding Support Group is considered very effective to increase support during breastfeeding. In relation to the effectiveness, Breastfeeding Support Group (86.4%) in the working area of Tembarak Primary Healthcare Center in Temanggung District received support express breast milk exclusively, and only Breastfeeding Support Group (31.8%) who received leaflets exclusively breastfed (Yunianti, Rofi'ah, and Rubiyanti, 2017).

Unlike Group B which consist of two activities, Group A have three activities. Activity III of Group A is a follow-up of Activity II (monitoring and evaluation of the exclusive breastfeeding calendar). Activity III aims to find out whether a calendar helps mothers to increase the frequency of everyday breastfeeding, ideally every two hours or 8-12 times a day. Activity III was

carried out for one week with two visits to breastfeeding mothers' houses, usually on the 3rd and 6th day. The initiators of Breastfeeding Support Group in the third activity put stickers on each door to appreciate mothers who succeed in ideal breastfeeding frequency in a day.

Group B monitor Activity III by looking at how intensive breastfeeding mothers use a pocketbook. Moreover, they conducted home visit as Group A did. Breastfeeding reminder will make mothers more motivated to increase the frequency of breastfeeding for their babies. Research on professional breastfeeding support for first-time mothers stated that early professional breastfeeding support, especially weekly telephone support, significantly increased the rates of exclusive breastfeeding in the early postnatal period and the overall duration of breastfeeding across the first 6 months (Fu *et al.*, 2014). When compared with the standard support group, 60% participants receiving professional telephone support were more likely to give breastmilk almost twice exclusively at the first-month postpartum. Across the first 6 months, participants receiving professional telephone support were about 20% less likely to stop breastfeeding if compared with the standard support group (Fu *et al.*, 2014). Providing mothers with telephone-based peer support at least six-month personal breastfeeding in the postpartum is an effective intervention for maintaining breastfeeding in the community with high breastfeeding initiatives (Forster *et al.*, 2019). It confirmed that to change a behavior, it needs a continuous intervention. Rayfield, Oakley and Quigley (2015) found breastfeeding support was more likely to be effective if it was proactive, delivered face to face and provided on an on-going basis.

From the results of the intervention program in the two groups analyzed, the intervention in Group B uses more

informative media and more ready preparation compared with the intervention in Group A. Although Group A makes and uses calendar media more interesting than other media.

Both programs evaluated the frequency of breastfeeding with home visit method and printed media as an everyday reminder. However, the duration of the intervention in each meeting is little different. Once both groups have formed Breastfeeding Support Group volunteers, assistance and monitoring of breastfeeding frequency (Group B) were directly carried out by Breastfeeding Support Group volunteers that have been approved. While, Group A only got pocket book which contains myth-fact information about exclusive breastfeeding.

### Program Success Analysis

Success can be measured in two basic ways. First, it involves setting goals or targets and then comparing actual activity to the goal. A successful program is seen from how many indicators are achieved under the plan. If the program has the same or excessive indicators of success designed before the program implementation.

Based on Table 3, it shows Group A have five indicators and Group B consist of seven indicators. Overall, the indicators in each group have covered the program success at  $\geq 80\%$ . When they are accumulated, the indicator success in Group A is 80% (4 of 5 indicators are achieved), while in Group B, it is 85.71% (6 of 7 indicators are achieved). Thus, Group B have higher indicator success than Group A.

When analyzing strengths and weaknesses of both programs, it can be explained that Group A had more active participants, more creative media, and more innovative and interesting theoretical materials. However, speaking about the weakness of program, the Village

Government in Group A did not involve in forming Basic Support Group and not participate to improve exclusive breastfeeding behavior and allocate higher budget for the activities. Whereas, Group A only analyzed general characteristics of the community but prospective volunteers. The intervention in Group A focuses on pregnant and breastfeeding women, not empowered volunteers.

While, Group B had lower budget for the program which is more efficient allocation and obtained support in the formation of Breastfeeding Support Group program. They also analyzed specifically prospective volunteers and addressed intervention focusing on their readiness and skills. However, the weaknesses include less attractive media, and passive breastfeeding mothers' participation.

From the analysis of strengths and weaknesses, Group B received more material and physical support, such as human resources. Even, the support also comes from the commitment of Breastfeeding Support Group members in health care facilities, such as families, health workers, and the Village Government.

The percentage of the success indicator in Group B was higher than in Group A. Thus, the intervention in Group B tends to be more effective. Group B involved many resources, for example human resources, financial resources, goods, etc. Human resources are an important component that influences the effectiveness of community empowerment programs as well as health problem solution in Group A and Group B.

A community empowerment is expected to improve the quality of Human Resources (HR), especially in shaping and changing the behavior of community to achieve a high level of health status. Thus, the policies and commitments are important and become the power in the interventions on large numbers of targets.

The existence of policies can help and facilitate an effective coordination system to change people's behavior.

In the implementation of Activity II, Group A used an individual approach. Individual approaches require more

energy to visit each target (breastfeeding mother). While, Group B used a group approach and an individual approach, such as intervention and group approach (Exclusive Breastfeeding Support Group).

Table 3. The Comparison of Program Success in Group A and Group B.

Program Success	
Group A	Group B
<p>"Be Ready to Exclusive Breastfeeding Village" Workshop (<i>Workshop SIAP DESASI</i>)</p> <ol style="list-style-type: none"> <li>1. Participants' attendance was 72% from the target of 50% (achieved).</li> <li>2. The percentage of participants who achieve high post-test score was 63% (not achieved).</li> <li>3. Thirty percent of participants conducted questions and answers (reached).</li> </ol>	<p>Exclusive Breastfeeding Fun Talkshow (<i>Talkshow TALK SIK ASIEK</i>)</p> <ol style="list-style-type: none"> <li>1. The attendance of participants in the program was 25% under the target of 50% (not achieved)</li> <li>2. The increasing attitude of participants towards exclusive breastfeeding was 18.75% above the target of 15% (target achieved)</li> </ol>
<p>One Fun Day with Breastfeeding Support Group</p> <p>Providing approval sheets and attaching stickers of Exclusive Breastfeeding Family reached &gt; 30% (achieved)</p>	<p>Exclusive Breastfeeding Support Group Session I (<i>Keping/Kelompok Pendamping I</i>)</p> <ol style="list-style-type: none"> <li>1. The membership and its structure of the Exclusive Breastfeeding Support Group Volunteers is a minimum of 10 volunteers (achieved)</li> <li>2. Volunteers' knowledge and skills in assisting target mothers (pregnant women and mothers breastfeeding 0-6 months) increased by 10% (achieved)</li> <li>3. Obtained commitment Exclusive Breastfeeding Support Group to support all activities increased by 80% (target achieved)</li> <li>4. A Letter of Support for Exclusive Breastfeeding Support Group Volunteers from the Village Head was issued (achieved)</li> <li>5. Modules and pocketbook for Exclusive Breastfeeding Support Group Volunteers have been compiled (achieved)</li> </ol>
<p>Monitoring and Evaluation</p> <p>The number of participants who wanted to be a part of the Exclusive Breastfeeding Family was &gt; 30% (achieved)</p>	<p>Exclusive Breastfeeding Support Group Session II (<i>Keping/Kelompok Pendamping II</i>)</p> <p>None</p>

Source: Field Work Report (Group 14 and 15) in the period of 2017/2018, Faculty of Public Health, Universitas Airlangga.

## CONCLUSION

The analysis of community's characteristics in Sugihwaras Village (Group A) and Sumbergede Village (Group B) tends to have similarity in terms of education level, occupation, and gender. Group A and B were dominated by junior and senior high school graduates. Types of occupations of Groups A and B were dominated by farmers, farmworkers, and employees of private companies. Also, the distribution of gender in both groups is balanced (50:50). By understanding how the community's characteristics, it will help to prepare the planning of an intervention program in the groups.

In terms of forms of intervention programs, Group A more intensively met the participants (4:3) if compared to Group B. The average duration of activities between Group A and Group B is the same with five-minute difference. The Village Government in Group B took part in forming Breastfeeding Support Group structure and fostered the volunteers. Therefore, Group B (Sumbergede Village) was more ready to conduct the program than Group A (Sugihwaras Village).

Based on the analysis of the success program, the percentage of achievement in Group B was 85.71%, which was 5.71% higher than Group A (80.00%). Whereas, Group B had more values and resource power. Consequently, the intervention program in Group B (Sumbergede Village) tends to be more effective and have a higher potential to become a sustainable program in the following year.

In further research, the researchers hope that the intervention program in Group B can be an alternative solution for other regions, which have the same problems. Ideally, to achieve completely successful exclusive breastfeeding, it requires enough resources, sustainable

and continuous commitment and supports from government, community, and colleagues.

## ACKNOWLEDGMENT

This study was supported by Field Work Project report from Group 14 and 15 2017/2018, Faculty of Public Health, Universitas Airlangga

## CONFLICT OF INTEREST

The authors state that there is no conflict of interest for this article.

## REFERENCES

- Astuti Sri; Judistiani, T. D. S. A. I. (2016) 'Evaluasi Pembentukan dan Pelatihan Kelompok Pendukung ASI di Desa Mekargalih dan Cipacing Kecamatan Jatiningor Kabupaten Sumedang', *Jurnal Kebijakan Kesehatan Indonesia*, Volume 5, pp. 81–85.
- Bosnjak, A. P. *et al.* (2009) 'Influence of sociodemographic and psychosocial characteristics on breastfeeding duration of mothers attending breastfeeding support groups', *Journal of Perinatal Medicine*, 37(2), pp. 185–192. doi: 10.1515/JPM.2009.025.
- Crossland, Ni. *et al.* (2016) 'Breast Pumps As An Incentive For Breastfeeding: A Mixed Methods Study Of Acceptability', *Maternal and Child Nutrition*, 4(12), pp. 726–739. doi: 10.1111/mcn.12346.
- Cusick, S. and Georgieff, M. K. (2017) *The First 1,000 Days of Life: The Brain's Window of Opportunity*, UNICEF Office of Research. Available at: <https://www.unicef-irc.org/article/958-the-first-1000-days-of-life-the-brains-window-of-opportunity.html> (Accessed: 4 October 2019).



- Fauziyyah, F. I. N. (2018) *Efektivitas Penggunaan Media untuk Meningkatkan Pengetahuan dan Sikap Ibu Tentang Makanan Pendamping ASI (MP-ASI) di Desa Kenep Kabupaten Sukoharjo*. Universitas Muhammadiyah Surakarta.
- Februhartanty, J. et al. (2012) 'Profiles of Eight Working Mothers Who Practiced', *Breastfeeding Medicine Journal*, 7(1). doi: 10.1089/bfm.2011.0017.
- Forster, D. A. et al. (2019) 'Proactive Peer (Mother-to-Mother) Breastfeeding Support by Telephone (Ringing up About Breastfeeding Early [RUBY]): A Multicentre, Unblinded, Randomised Controlled Trial', *EClinicalMedicine*, 8, pp. 20–28. doi: 10.1016/j.eclinm.2019.02.003.
- Fu, I. C. Y. et al. (2014) 'Professional breastfeeding support for first-time mothers: A multicentre cluster randomised controlled trial', *BJOG: An International Journal of Obstetrics and Gynaecology*, 121(13), pp. 1673–1683. doi: 10.1111/1471-0528.12884.
- Hajeebhoy, N. (2016) *The Lancet Breastfeeding Series*. Available at: [https://www.who.int/nutrition/events/2016\\_bfhi\\_congress\\_presentation\\_la\\_testscience\\_nemat.pdf?ua=1](https://www.who.int/nutrition/events/2016_bfhi_congress_presentation_la_testscience_nemat.pdf?ua=1).
- Indonesian Ministry of Health (2016) *General Guidelines For A Healthy Indonesia Program With A Family Approach*. Jakarta: Indonesian Ministry of Health,. Available at: [http://www.depkes.go.id/resources/download/lain/Buku\\_Program\\_Indonesia\\_Sehat\\_dengan\\_Pendekatan\\_Keluarga.pdf](http://www.depkes.go.id/resources/download/lain/Buku_Program_Indonesia_Sehat_dengan_Pendekatan_Keluarga.pdf).
- Indonesian Republic Government (2012) *Peraturan Pemerintah RI No.33 Tentang Pemberian Air Susu Ibu Eksklusif*. Indonesia.
- Nurrohmah, A., Prawitasari, S. and Nisman, W. (2015) 'Role of mother support group (KP-Ibu) on behavior of exclusive breastfeeding in work area primary health care (Puskesmas) of Ngoresan Surakarta', *International Journal of Research in Medical Sciences*, 3(1), pp. S85–S91. doi: 10.18203/2320-6012.ijrms20151526.
- Public Health Office of Bojonegoro Districts (2017) *The Bojonegoro District Health Profile Data in 2017*. Bojonegoro.
- Purwanti, Y. (2015) 'Korelasi Partisipasi Ibu Menyusui pada Kelompok Pendamping ASI dengan Keberhasilan Pemberian ASI Eksklusif', *Jurnal Kebidanan dan Keperawatan*, 11(1), pp. 73–82.
- Rayfield, S., Oakley, L. and Quigley, M. A. (2015) 'Association between breastfeeding support and breastfeeding rates in the UK: a comparison of late preterm and term infants.', *BMJ open*, 5(11), p. e009144. doi: 10.1136/bmjopen-2015-009144.
- Silbert Flagg, J. and Balbier, E. (2016) 'Impact of Mother's Breastfeeding Support: Lactation Support Provided in a Group Setting', *Journal of Pregnancy and Child Health*, 3(4). doi: 10.4172/2376-127x.1000274.
- Suhertusi, Binarni; Desmiwati; Nurjasmii, E. (2015) 'Pengaruh Media Promosi Kesehatan tentang ASI Eksklusif terhadap Peningkatan Pengetahuan Ibu di Puskesmas Lubuk Begalung Padang tahun 2014', *Jurnal Kesehatan Andalas*, Volume 4, pp. 17–22.
- Susilo, J., Kurdant, W., & Siswati, T. (2012). Hubungan Program Kelompok Pendukung Ibu terhadap Pengetahuan dan Praktik Pemberian ASI Eksklusif. *Gizi Indon*, 35(1), 30–40.
- Sutaryono; Purwaningsih, E. (2015)

'Pembentukan Kelompok Pendukung Air Susu Ibu (ASI) Muhammadiyah Klaten', *The 2nd University Research Coloquium 2015*, pp. 383–387.

The Ministry of Women's Empowerment and Child Protection (2010) *Peraturan Menteri Negara Pemberdayaan Perempuan dan Perlindungan Anak Republik Indonesia Nomor 03 Tahun 2010 Tentang Penerapan Sepuluh Langkah Menuju Keberhasilan Menyusui*. Indonesia.

The Ohio Department of Health (2011) *Factors That Influence Breastfeeding Initiation And Persistence In Ohio's Appalachian Region*. Athens. Available at: <https://www.ohio.edu/voinovichschool/upload/Breastfeeding-in-the-Ohio-Appalachian-Region.pdf>.

Wati, N. H. and Muniroh, L. (2018) 'Pengaruh Kelompok Pendukung Air Susu Ibu (Kp-Asi) Terhadap Perilaku Pemberian Asi Eksklusif Dan Status Gizi Bayi 6-12 Bulan', *Media Gizi Indonesia*, 13(1), p. 33. doi: 10.20473/mgi.v13i1.33-40.

World Health Organization (2019) *Ten steps to successful breastfeeding (revised 2018)*. Available at: <https://www.who.int/nutrition/bfhi/ten-steps/en/> (Accessed: 4 October 2019).

Yunianti, B., Rofi'ah, S. and Rubiyanti (2017) 'Efektivitas Kelompok Pendukung ASI (KP-ASI) Eksklusif terhadap Perilaku Pemberian ASI Eksklusif', *Jurnal Ilmiah Bidan*, 11(1), pp. 48–54.