RESEARCH STUDY Open Access

Peningkatan Implementasi 10 LMKM (Langkah Menuju Keberhasilan Menyusui) melalui Intervensi BENEFIT (Menyusui Eksklusif di Fasilitas Kesehatan) di Jawa Timur, Indonesia

Improving Implementation of 10 STSB (Steps to Successful Breastfeeding) through BENEFIT (Breastfeeding Exclusively in Health Facility) Intervention in East Java, Indonesia

Dinar SM Lubis[1], Mellysa Kowara[2*], Pande Putu Januraga[1], Yesi Crosita[2], Istiana Marfianti[2], Desak Dewi Satyawati[2]

ABSTRAK

Latar Belakang*: Peningkatan cakupan ASI eksklusif dapat dilakukan dengan menerapkan 10 LMKM di fasilitas kesehatan. Berdasarkan hasil penilaian program 10 LMKM tahap 1 menunjukkan perlunya penguatan 10 LMKM terutama langkah 1 dan 2 sebagai prosedur pengelolaan kritis (Critical Management Procedural). Untuk menindaklanjuti temuan tersebut maka dijalankan Project BENEFIT untuk meningkatkan penerapan dari langkah-langkah tersebut. Proyek tersebut dilaksanakan pada tahun 2019 hingga 2020 di 5 kabupaten/kota di Jawa Timur yaitu Bondowoso, Jember, Probolinggo, Trenggalek dan Surabaya.*

Tujuan*: Penelitian ini bertujuan untuk mengevaluasi implementasi penguatan 10 LMKM yang dilakukan melalui proyek BENEFIT yang berfokus pada penguatan langkah 1 dan 2 di fasilitas kesehatan di Provinsi Jawa Timur dan bagaimana pengaruhnya terhadap penerapan langkah lainnya serta pencapaian dalam indikator menyusui.*

Metode*: Studi crossectional dilakukan pada 720 responden yang terdiri dari 143 pimpinan fasilitas kesehatan dan 577 ibu nifas (untuk validasi data). Pengumpulan data dilakukan dengan menggunakan kuesioner yang diadaptasi dari BFHI Unicef/WHO yang mengevaluasi penerapan keseluruhan langkah dalam 10 LMKM menggunakan aplikasi KoBo ToolBox pada periode Juli-September 2020.*

Hasil: *Terdapat peningkatan dalam penerapan 10 LMKM terutama langkah 1 dan 2. Langkah 1 yaitu tersedianya kebijakan tertulis pemberian ASI eksklusif menunjukkan peningkatan kepatuhan yang signifikan (66,4 menjadi 72,82; α= 0,015). Sedangkan untuk tahap 2 (pelatihan dukungan menyusui bagi petugas kesehatan dan non-kesehatan) menunjukkan peningkatan yang signifikan dalam pelaksanaannya (69,5 menjadi 77; α = 0,015). Prosedur manajemen kritis berperan sebagai landasan yang mempengaruhi praktik dukungan menyusui di fasilitas kesehatan. Berdasarkan hasil monitoring dan evaluasi menunjukkan adanya perbaikan pada praktik dukungan menyusui selama perawatan ibu di fasilitas kesehatan seperti cakupan IMD (71,2%) baik pada persalinan normal maupun seksio sesarea, rawat gabung (69,1%) dan praktik menyusui bayi baru lahir. (73,5%).*

Kesimpulan: *Intervensi BENEFIT yang berfokus pada penguatan langkah 1 dan 2 dalam 10 LMKM sebagai prosedur manajemen kritis mampu meningkatkan kepatuhan implementasi keseluruhan langkah 10 LMKM. Sebagai landasan untuk melaksanakan langkah-langkah lainnya, penguatan 10 LMKM terutama langkah 1 dan 2 terbukti dapat meningkatkan praktik dukungan menyusui di fasilitas kesehatan oleh seluruh staf.*

Kata Kunci*: Menyusui, 10 LMKM, BENEFIT*

ABSTRACT

Background: 10 Steps to Successful Breastfeeding (STSB) was implemented as an attempt to improve the coverage of exclusive breastfeeding in healthcare facilities. Results of the phase 1 Baby-Friendly Hospital Initiative (BFHI) assessment necessitated further strengthening for steps 1 which is the availability of an exclusive breastfeeding policy and step 2 which entails training provision for maternal and child health officer. These two steps are regarded as critical management procedures which act as a foundation for the implementation of subsequent steps. To follow up on these findings, Project BENEFIT was implemented to improve steps 1 and 2. The project was carried out between 2019 and 2020 in 5 districts in East Java, namely Bondowoso, Jember, Probolinggo, Trenggalek and Surabaya.

Objectives: This objective of this study was to evaluate the implementation of the BENEFIT project and how it affects the implementation of other steps as well as how it impacts breastfeeding indicators.

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Methods: This cross-sectional study was conducted on 720 respondents consisting of 143 health facility leaders and 577 post-partum mothers to validate response. Data was collected using a questionnaire adapted from Baby Friendly Hospital Initiation (BFHI) guidelines by World Health organization (WHO) and United Nations Children Emergency Fund (UNICEF) using the KoBo ToolBox application between July and October 2020**.**
Results: There was an improvement in the implementation of steps 1 and 2. A significant increase in compliance was found for Step 1 (66.4 to 72.82 α = 0.015) and step 2 (69.5 to 77.9, α = 0.15). Subsequent monitoring and evaluation also showed moderate improvement on breastfeeding support practice in health facilities such as coverage of skin-to-skin contact (71.2%) both on normal and section-caesarean delivery, rooming-in (69.1%) and the practice of breastfeeding new born (73.5 %).
Conclusion: The BENEFIT project assisted in the increased compliance for steps 1 and 2 STSB, which further improved breastfeeding support practices by all healthcare facility staff members for other steps.

Keywords: Breastfeeding, 10 STSB, BENEFIT

*Correspondent:
mellysa.kowara@gmail.com
Mellysa Kowara
Centre for Public Health Innovation (CPHI), Fakultas Kedokteran, universitas Udayana
Jalan P.B. Sudirman, Kampus Unud Sudirman, Kota Denpasar, Bali
Published by Universitas Airlangga and IAGIKMI

INTRODUCTION

Exclusive breastfeeding has been shown to have a crucial role in preventing stunting and lowering the risks for infant morbidity and mortality. [1] Infants who receive exclusive breastfeeding demonstrate better nutritional status as well as superior physical and cognitive development, resulting in lifelong impacts. Breastfeeding is also beneficial for the mother's health and the family's economy. [2,3] Despite its highly advantageous impacts, coverage of exclusive breastfeeding remains low. Global data from 2013-2018 indicated that exclusive breastfeeding among infants up to 6 months of age was 41% while early initiation of breastfeeding (EIB) was only 43%.[4] These coverage rates are still far from the collective target of reaching 70% for exclusive breastfeeding and early initiation of breastfeeding by 2030. [4] Consistent with global coverage, exclusive breastfeeding in Indonesia has yet to reach the targeted rate despite having experienced an increase in the last 5 years from 30.2% in 2013 to 62.2% in 2018. Likewise, EIB has also increased from 38.2% in 2013 to 58.2% in 2018. [5,6]

A number of factors contribute to the low coverage of exclusive breastfeeding, including a lack of confidence among mothers to breastfeed, a lack of knowledge on the benefits of breastfeeding, poor breastfeeding techniques, lack of support from family members and healthcare facilities, work commitments among mothers, issues with breastfeeding, and health issues with the infant. [7,8] Healthcare facilities are key to supporting the success of exclusive breastfeeding through implementing policies and regulations which promote sustainable exclusive breastfeeding. [9] The entire process of initiating breastfeeding occurs at the facility level in which healthcare workers have a supporting role. The lack of support provided by healthcare workers in breastfeeding is, hence, reflected in the low coverage of exclusive breastfeeding. [10] Therefore, it is crucial for healthcare facilities to consistently implement the Baby Friendly Hospital Initiatives (BFHI) as advised by WHO/UNICEF through complying with the 10 Steps to Successful Breastfeeding (STSB). [11,12] In conjunction with this program, the Government of Indonesia also supports exclusive breastfeeding by establishing a variety of supportive regulations such as Government of Indonesia Regulation on Exclusive Breastfeeding, Regulation number 36 Year 2009 on Health, among others. [13]

However, assessments on 10 STSB implementation at healthcare facilities found that mothers receive suboptimal breastfeeding support due to a lack of written policies on exclusive breastfeeding which is routinely communicated to staff members. Additionally, the competencies of healthcare workers were inadequate to provide breastfeeding care for mothers and infants. [14] The lack of policy which supports breastfeeding and lack of minimum competency for breastfeeding support among healthcare workers resulted in the poor implementation of step 3 to 10 of 10 STSB (Table 1). Meanwhile, in order to maximize the achievements in key clinical practices (steps 3-10), it is crucial to first optimize the implementation of steps 1 and 2 for critical management procedures. Studies have demonstrated that step 1 (policy) and step 2 (training) are foundational components in determining the success of 10 STSB. A written policy document and capacity development for healthcare workers' competency in supporting breastfeeding can significantly increase the coverage of exclusive breastfeeding. [15] Hence, a lack of awareness and attention towards 10 STSB policies and staff training can cause a domino effect on the implementation of subsequent steps and result in low coverage in exclusive breastfeeding. [16]

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Table 1. Steps of 10 STSB.

10 STEPS TO SUCCESSFUL BREASTFEEDING	
STEP 1	Have a written infant feeding policy that is routinely communicate to staff and parents.
STEP 2	Provide training for all healthcare staff to ensure competence to implement breastfeeding programs.
STEP 3	Inform pregnant women on the benefits and management of breastfeeding.
STEP 4	Facilitate early initiation of breastfeeding (EIB) to support mothers to begin breastfeeding within an hour after childbirth.
STEP 5	Explain techniques for breastfeeding and sustaining lactation to mothers even when they need to be separated from their infants.
STEP 6	Do not provide newborn infants foods or fluids other than breastmilk except when there is a medical indication to do so.
STEP 7	Practice rooming in.
STEP 8	Breastfeed according to the infant's cues
STEP 9	Not providing pacifiers
STEP 10	Promote the formation of breastfeeding support groups and refer mothers to attend those groups upon discharge from the healthcare facility.

Departing from findings and evidence which demonstrate the need for strengthening step 1 (policy) and 2 (training), The Global Alliance for Improved Nutrition (GAIN) and Center for Public Health Innovation (CPHI) established the Breastfeeding Exclusively in Health Facility (BENEFIT) project which focuses on strengthening critical management procedures of 10 STSB in selected districts of East Java Province. The aim of this study is to evaluate the implementation of BENEFIT which focuses on strengthening steps 1 and 2 at healthcare facilities, their impact towards the implementation of subsequent steps and breastfeeding indicators.

METHODS

Benefit Intervention Description

BENEFIT was implemented beginning in December 2019 until January 2021 focusing on step 1, on having a written policy document which supports breastfeeding and step 2 on supporting training for healthcare workers on breastfeeding. Activities included in the BENEFIT ranged from advocacy efforts to obtain the commitment and support from the district/provincial government, health offices and targeted healthcare facilities. This was followed by core activities consisting of training and assistance on policy and standards of procedures (SOP) drafting based on 10 STSB. Training was also provided for healthcare and non-healthcare workers on supporting breastfeeding. Subsequently, monitoring and evaluation was conducted to evaluate the compliance rate with 10 STSB at each facility. In order to provide a sustainable knowledge transfer, an e-learning website was created to store breastfeeding support material from the BENEFIT project, which will be available for access by healthcare and no-healthcare workers without cost. The entire activity was conducted during the COVID-19 pandemic such that policy formulating, and training occurred virtually. All activities were performed in compliance with infection prevention standards.

Study design and location

This study employs a cross-sectional approach which measures the compliance rate of healthcare facilities towards the implementation of 10 STSB in 5 districts of East Java Province. Districts which will have been selected for intervention were Surabaya City, Bondowoso, Jember, Probolinggo, and Trenggalek Regencies. These districts were selected on the basis that they were the locus where stunting occurs were targeted for the Baduta 2.0 (*bawah dua tahun* or under two years old) program, a collaborative effort between GAIN and the Indonesian Ministry of Health (MOH) which aims to increase the nutritional status of children in the first 1000 days of life. This effort to prevent stunting depends on two key programs, namely the Emo-Demo and 10 STSB programs.

Data Collection and Analysis

Healthcare facilities were selected in each district using total sampling for Bondowoso, Probolinggo and Trenggalek, 85% sampling for Jember and 26% sampling for Surabaya. Healthcare facilities in Surabaya and Jember were selected through participatory efforts involving stakeholders from the Province Health Office and District Health Office based on the following inclusion criteria:

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Table 2. Inclusion criteria for healthcare facilities selected for BENEFIT intervention

HEALTHCARE FACILITY	INCLUSION CRITERIA
HOSPITALS	1. Mother and baby hospitals (priority 1) 2. Type C government hospitals (priority 2) 3. Type B hospitals (priority 3)
COMMUNITY HEALTH CENTERS	1. Community health centers assisting in the highest number of childbirth (healthcare facilities were selected based on a ranking of number of births assisted). 2. *Pelayanan Obstetri Neonatal Emergensi Dasar* (PONED or Basic obstetrics and neonatal emergency services) community health centers (community health centers with a PONED permit or where the entire staff has been trained in PONED).

The numbers and coverage of healthcare facilities targeted for intervention are demonstrated in the following table:

Table 3. Number and Coverage of Intervention Healthcare Facilities

Regency/City	Number of childbirths		Total	Coverage (%)
	Hospitals	Community health centers		
Bondowoso	3	25	28	100
Jember	4	19	23	85
Probolinggo	6	31	37	100
Trenggalek	3	22	25	100
Surabaya	9	22	31	26
Total	25	119	144	61

After the healthcare facilities included in the BENEFIT intervention were determined, interviewees consisting of healthcare facility leaders and postpartum mothers were selected. A total of 721 respondents were interviewed, consisting of 144 healthcare facility leaders and 577 postpartum mothers for validation.

Data collection was conducted by interviewing healthcare facility leaders on their compliance with 10 STSB and interviewing postpartum mothers to validate their responses. Data validation was only performed for all steps except for step 2. Healthcare facility leaders who were interviewed were those who were responsible to manage antenatal care (ANC) programs or labour and delivery wards. Postpartum mothers were selected using incidental sampling on the same day the manager was interviewed. Data collection instruments were adapted from the Baby Friendly Hospital Initiation (BFHI) guidelines by World Health organization (WHO) and United Nations Children Emergency Fund (UNICEF). [12] Data collection was performed by trained enumerators using e-questionnaires on Kobo Toolbox application between July-October 2020.

Observational data were also used as supportive documents on the implementation of BFHI at healthcare facilities. The data was tabulated in two different computers by two researchers to ensure data quality. Data processing was performed using SPSS using the Wilcoxon test with a significance value of 5% to determine the difference between 10 STSB compliance evaluation in 2019 BFHI and in 2020 through BENEFIT. Healthcare facilities were deemed to be compliant if they score ≥ 80% for each step.

RESULTS AND DISCUSSION

As demonstrated in Table 3, most of the intervention sites for BENEFIT are mostly PONED community health centers (82.6%) and the rest were Pelayanan Obstetri Neonatal Emergensi Komprehensif (PONEK or Comprehensive obstetrics and neonatal emergency services hospitals). For the community health centers, 57.1% were accredited as intermediate level facilities and 68% were Type C hospitals. All of these facilities have the necessary infrastructure and services for obstetrics and gynaecology which were supportive of the 10 STSB implementation. [17] In addition, almost all healthcare facilities (97.2%) accept patients using the BPJS Kesehatan or national insurance scheme. Almost all of facilities (91.7%) also possess lactation rooms, which means that they provide facilities which support mothers who breastfeed.

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Table 4. Characteristics of BENEFIT project intervention healthcare facilities

No	Healthcare Facility Characteristics	f (%)
1	Healthcare facility type	
	Hospital	25 (17.4)
	Community Health Center	119 (82.6)
2	Obstetric Service Category	
	PONED	119 (82.6)
	PONEK	25 (17.4)
3	Level of Service	
	• Community Health Center Accreditation	
	Basic	13 (10.9)
	Intermediate	68 (57.1)
	Primary	31 (26)
	Comprehensive	7 (5.9)
	• Hospital	
	Type A	1 (4)
	Type B	5 (20)
	Type C	17 (68)
	Type D	2 (8)
4	Regency	
	Bondowoso	28 (19.4)
	Jember	23 (16)
	Probolinggo	37 (25.7)
	Trenggalek	25 (17.4)
	Surabaya	31 (21.5)
5	BPJS Services	
	Yes	140 (97.2)
	No	4 (2.8)
6	Availability of Lactation Room	
	Available	132 (91.7)
	Unavailable	12 (8.3)

The 10 STSB implementation assessment results in 2019 and 2020 are demonstrated in Table 4. Compliance with the 10 steps was evaluated based on self-appraisal and several steps were validated against report from birthing mothers to determine the differences in the service provided and service perceived by the patients. In the 2019 assessment, the lowest coverage achieved was for step 1 and step 2. Both of these steps are part of the critical management procedures which serves and a foundation in implementation clinical practice elements in steps 3-10. [12] The same assessment also indicates suboptimal implementation of steps 3-10, whereby a few steps have yet to reach the targeted coverage such as steps 4, 6, and 7. Furthermore, the validation results demonstrated a lower score compared to self-appraisal scores, indicating that mothers perceive inadequate breastfeeding support and healthcare facilities tend to report higher scores on their performance. [18]

The 2020 BENEFIT monitoring and evaluation demonstrates a significant increase in the implementation of steps 1 and 2 after intensive intervention to healthcare facilities for a year. Data indicates a significant increase in average compliance for step 1 (66.4 to 72.8; α: 0.015) and step 2 (69.5 to 77.9; α: 0.015). Improving compliance on critical management procedures reflected in steps 1 and 2 will inevitably impact the improvements in the compliance for other steps, where a significant increase is found for step 3, 4, 5 and 10. Validation results also indicated an increase compared to the 2019 assessment, although still relatively lower than self-appraisal results. This increase in compliance towards key clinical practices is consistent with studies in Indonesia where significant impacts to practice of breastfeeding support when policies are in place and healthcare workers perform optimally in supporting mothers who breastfeed. However, strong commitment is required as well as collaboration between healthcare workers and government agencies to continue implementing breastfeeding through continued communication strategies. [19,20]

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Table 5. 10 STSB Coverage between 2019 and 2020

Step	2019 Coverage		2020 Coverage		p-value	Status
	Mean (SD)	Validation	Mean (SD)	Validation		
Step 1	66.4 (25.4)	N/A	72.8 (16.1)	94.4 (8.5)	0.015	Increase
Step 2	69.5 (24.1)	N/A	77.9 (24.4)	N/A	0.015	Increase
Step 3	89.1 (25)	78.1 (22.9)	96.7 (13.8)	85.2 (23.8)	0.049	Increase
Step 4	75.3 (24.8)	59.8 (26.8)	84.5 (19.6)	69.3 (20.5)	0.007	Increase
Step 5	80.8 (18.5)	81.3 (26.9)	88.4 (10.4)	81.2 (21.4)	0.000	Increase
Step 6	75.9 (17.6)	N/A	75.3 (13.2)	37.2 (16.5)	0.004	Decrease
Step 7	65.4 (25.9)	59.8 (29.8)	63 (21.7)	67.8 (21)	0.073	Decrease
Step 8	98.1 (7.8)	91.0 (21.5)	98.6 (9.6)	86.3 (27.6)	0.439	Increase
Step 9	94.6 (16.1)	82.7 (32.8)	98.3 (9.2)	71.8 (29.9)	0.090	Increase
Step 10	91.4 (16.9)	N/A	84 (22.8)	46.9 (24.8)	0.000	Decrease
Average	80.7 (12)	75.5 (12.8)	83.9 (11.9)	71.1 (18.8)	0.092	Increase

The 2020 monitoring evaluation results indicated that a few steps require further improvement, namely step 6 and 10. Big differences were found between the self-appraisal scores and validation scores of these two steps. Mothers perceived inadequate implementation for step 6. In reality, formula milk was often still widely promoted in healthcare facilities which have committed to promote breastfeeding. [21] Based on monitoring and evaluation, formula milk can still often be found in shops or cafeteria in healthcare facilities, easily accessible for patients to purchase without consent from their doctors. There are also many healthcare facilities which recommend providing formula milk to infants. This issue surely impedes the effort to breastfeed, as initiation of breastfeeding often occurs at healthcare facilities. [22] The other step which require further strengthening is step 10 or referral to breastfeeding support groups when discharging mothers from the hospital. This is a crucial step to ensure mothers have a reference to which they can receive support when encountering issues with breastfeeding. A study performed in the United States of America found that professional support from healthcare facilities and their staff can impact the decision and success of breastfeeding. [23]

The compliance rates of each intervention district between 2019 and 2020 are displayed in Table 5. Almost all the steps experience significant increase in compliance across the five districts. Bondowoso Regency achieved the highest compliance for step 1 and 2, reaching 79.7%, and 83.2% respectively. Increase in the compliance for the first two steps also impacted other steps, especially step 3 where the average compliance in each district exceeded 85%. However, there remains steps which still require further improvement, including steps 6 and 7. Both these steps have yet to reach the minimum compliance threshold of 80%, requiring stronger commitments as well as monitoring and evaluation for their implementation. [24]

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Table 6. 10 STSB Coverage in Each Regency/City in East Java Province between 2019 and 2020

Step	Bondowoso		Jember		Probolinggo		Trenggalek		Surabaya	
	Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Step 1	58 (31)	79.7 (10.5)	65 (21)	69.2 (19.4)	65 (28)	72.3 (17.3)	69 (24)	72.7 (14.8)	72 (22.1)	69.2 (16.3)
Step 2	53 (22.7)	83.2 (19.8)	72.2 (21)	76.4 (26.4)	77.3 (24.4)	77.2 (27)	89.3 (13.6)	72.6 (21)	65.7 (21.9)	79.3 (26)
Step 3	91.8 (23.1)	98.6 (5.2)	94.1 (13.2)	92.2 (23.9)	96.5 (9.2)	96.2 (16.9)	88 (25.4)	97.6 (6.6)	82.4 (32.3)	98.1 (7.9)
Step 4	78.4 (8.7)	88.4 (12.7)	81.1 (20.7)	84.8 (14.6)	72.1 (28.7)	83.8 (23)	83 (18.2)	76 (26.5)	67.4 (32.6)	88.7 (15.6)
Step 5	77.9 (13.6)	86.1 (10.3)	81.1 (21.2)	90.8 (10.4)	79.4 (18.9)	87.4 (10.8)	90.5 (14.6)	88 (10.6)	78 (20.3)	90.3 (9.8)
Step 6	65.3 (13.8)	76 (14)	71 (20.6)	77 (12.7)	68.1 (17.9)	74.5 (13.1)	85.4 (13.9)	72 (14)	77.7 (16)	76.9 (12.6)
Step 7	55.4 (15.3)	59.8 (21.9)	66.9 (24.3)	65.2 (23.5)	72 (21.1)	62.2 (20.1)	87.5 (22.6)	52 (21.6)	57.6 (27.9)	74.2 (17.7)
Step 8	100 (0)	100 (0)	93.7 (13.2)	97.1 (9.6)	100 (0)	96.4 (17.2)	98.3 (7.3)	100 (0)	97.9 (8)	100 (0)
Step 9	96.1 (13.6)	100 (0)	95.9 (13.8)	97.8 (10.4)	92.6 (17.9)	97.3 (11.5)	98.8 (7.9)	96 (13.8)	92.1 (19.9)	100 (0)
Step 10	96.5 (11.1)	82.1 (24.5)	90.8 (17.4)	82.6 (24.3)	88.8 (22.1)	91.3 (16)	94 (21.3)	64 (23.8)	88 (14.3)	94.2 (14.8)
Average	77.2 (18.4)	85.4 (12.5)	81.2 (11.9)	83.3 (11.3)	81.2 (12.5)	83.9 (12)	88.4 (8.6)	79.1 (15.8)	77.9 (12.6)	87.1 (11.4)

BENEFIT Project monitoring and evaluation in 2020 indicated an increase in the percentage of healthcare facilities which are compliant with 10 STSB, indicated with the 80% score threshold. In 2020, the number of healthcare facilities which are compliant with 10 STSB was 34%, a 9% increase from 2019. The increase in number of healthcare facilities which are compliant with 10 STSB impacts breastfeeding indicators at healthcare facilities, as displayed in Figure 1. There were three practical breastfeeding support provided at healthcare facilities to support the success of exclusive breastfeeding, which include EIB, rooming-in, and breastfeeding while still being admitted at the healthcare facilities.[25] Based on a survey in Italy, it was found that EIB, rooming in and early education on breastfeeding have been proven to increase the coverage of exclusive breastfeeding. [26]

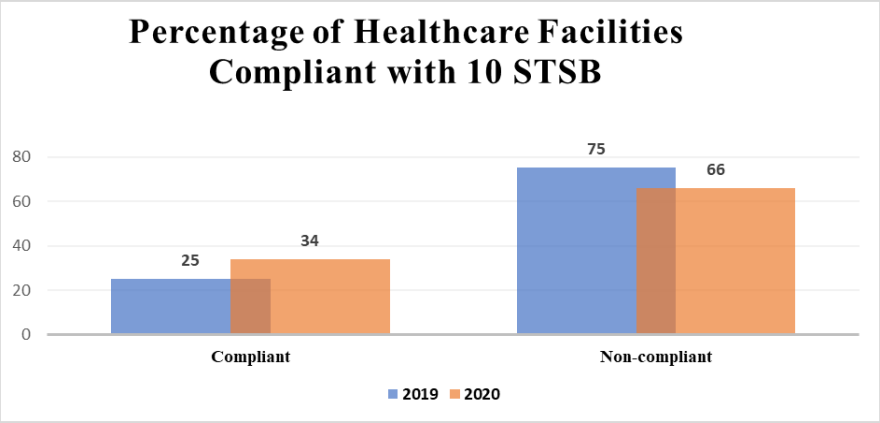

Figure 1. Percentage of healthcare facilities compliant with the implementation of 10 STSB in East Java Province in 2020

Monitoring and evaluation data between July and September 2020 indicated good coverage for 3 breastfeeding indicators. EIB reached 71.2%, rooming in reached 69.1% and breastfeeding while being admitted in the healthcare facility reached 73.5% (Figure 2). Breastfeeding support was not provided under certain medical circumstances such as infants with low birth weight, premature births, asphyxia, neonatal deaths, and mothers with HIV infection among others. Meanwhile, non-medical reasons for withholding breastfeeding support were due to request from the family, recommendation from the doctor, inaccurate perception

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

towards breastfeeding from the mothers, among other factors. Collectively, the inadequate implementation of breastfeeding support in the intervention districts include EIB (28.8%), rooming in (30.9%), and breastfeeding while still admitted in the healthcare facility (26.5%). These numbers, however, are relatively low compared to the overall coverage of East Java Province where the percentage of infants not receiving EIB was 36.3% and not receiving exclusive breastfeeding was 25.5%. [5]

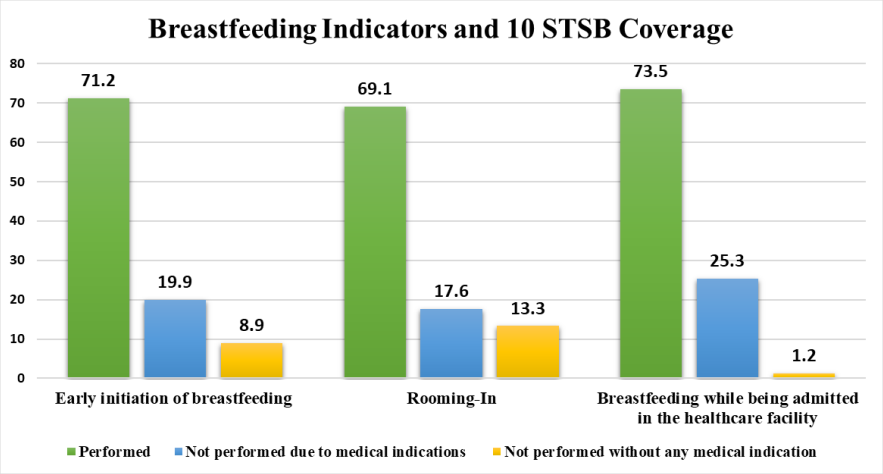

Figure 2. Coverage of breastfeeding Indicators in healthcare facilities during monitoring and evaluation in 2020

Good coverage of these breastfeeding support indicators at healthcare facilities are related to the improved implementation of 10 STSB, especially for steps 1 and 2. Based on evaluation of breastfeeding programs in the USA, to increase breastfeeding rates, supportive policies are needed and must be implemented. Likewise, healthcare facilities with written policies tend to generate services which better support breastfeeding and achieve higher rates of breastfeeding mainly for infants 24-48 hours after birth. [15] Additionally, increasing the number of trained healthcare workers further promotes a supportive environment for breastfeeding. An education program for maternity staff in Louisiana, USA, significantly impacts knowledge, attitude, and confidence of healthcare workers to provide breastfeeding support. This program was also capable of increasing the coverage of breastfeeding in the area. [27]

Although coverage rates on 10 STSB and breastfeeding indicators have shown fairly significant increases, there are still room to further improvements if impeding factors to strengthening 10 STSB can be overcome. During the BENEFIT project, challenges such as the COVID-19 pandemic, poor understanding towards 10 STSB and lack of supportive policies on breastfeeding were found. The COVID-19 pandemic also impacted Indonesia where activities had to be conducted virtually rather than in-person, leading to a lack of intensive assistance during the process of policy formulation and training, further impeding the implementation of 10 STSB. Additionally, it was found that almost all staff members at healthcare facilities did not know about 10 STSB and did not possess supporting SOPs, such that the research team had to work more intensively to provide education on 10 STSB and its benefits for the healthcare facilities. These challenges caused the suboptimal increase in compliance with 10 STSB.

STUDY LIMITATIONS

Three main limitations of the study are the cross-sectional approach to data collection, the short duration or the study and that monitoring, and evaluation occurred during the COVID-19 pandemic. Data collected using a cross-sectional method was only able to represent information from one point in time and could not evaluate whether it has impacted target of exclusive breastfeeding for the first 6 months of life. The 3-month duration of the study was very brief and could not evaluate long term compliance with 10 STSB in healthcare facilities. Furthermore, the COVID-19 pandemic complicated the data collection process. Future studies should take into consideration the limitations of this study in their design process.

CONCLUSION

This study concludes that the intervention for steps 1 and 2 can improve the implementation of other steps and breastfeeding indicators in healthcare facilities. However, routine monitoring and evaluation will be essential to ensure long term compliance with 10 STSB by healthcare facilities. In addition, continuous training will be required to ensure continued renewal of knowledge to all staff members to support exclusive breastfeeding.

CONFLICT OF INTEREST AND FUNDING DISCOSURE

All of authors have no conflict of interest in this article. This research was funded by Global Alliance for Improved Nutrition (GAIN).

REFERENCES

1. Natchu, U. C. M. *Et Al.* Exclusive Breastfeeding Reduces Risk Of Mortality In Infants Up To 6 Month Of Age Born Tanzanian Women. *Am. J. Clin. Nutr.* **96**, 1071–1078 (2012).
2. Krol, K. M. & Grossmann, T. Psychological Effects

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**

Of Breastfeeding On Children And Mothers. *Bundesgesundheitsblatt. Gesundheitsforschung. Gesundheitsschutz* **61**, 977 (2018).
3. Lee, H. *Et Al.* Effect Of Breastfeeding Duration On Cognitive Development In Infants: 3-Year Follow-Up Study. *J. Korean Med. Sci.* **31**, 579–584 (2016).
4. World Health Organization And Unicef. *Global Breastfeeding Scorecard: Increasing Commitment To Breastfeeding Through Funding And Improved Policies And Programmes*. (2019).
5. Kemenkes Ri. *Laporan Nasional Riset Kesehatan Dasar (Riskesdas) 2018*. (2019).
6. Kemenkes Ri. *Laporan Nasional Riset Kesehatan Dasar (Riskesdas) 2013*. (2013).
7. Asma Yaqub, S. G. Reasons For Failure Of Exclusive Breastfeeding In Children Less Than Six Months Of Age. *J Ayub Med Coll Abbottabad* **25**, 165–7 (2013).
8. Titaley, C. R. *Et Al.* Determinants Of Low Breastfeeding Self-Efficacy Amongst Mothers Of Children Aged Less Than Six Months: Results From The Baduta Study In East Java, Indonesia. *Int. Breastfeed. J.* **16**, 1–15 (2021).
9. Garnham, L. D. Improved Support Required To Increase Breastfeeding Rates. *Br. J. Gen. Pract.* **64**, 126 (2014).
10. Dellen, S. A. Van, Wisse, B., Mobach, M. P. & Dijkstra, A. The Effect Of A Breastfeeding Support Programme On Breastfeeding Duration And Exclusivity: A Quasi-Experiment. *Bmc Public Heal. 2019 191* **19**, 1–12 (2019).
11. Gavine, A., Mcfadden, A., Macgillivray, S. & Renfrew, M. J. Evidence Reviews For The Ten Steps To Successful Breastfeeding Initiative. *J. Heal. Visit.* **5**, 378–380 (2017).
12. World Health Organization (Who). Ten Steps To Successful Breastfeeding. *Who* (2018).
13. Government Republic Of Indonesia. *Regulation Number 33 Year 2012 Concerning The Provision Of Exclusive Breastfeeding*. (2012).
14. Center For Public Health Innovation (Cphi). *Asesmen Sepuluh Langkah Menuju Keberhasilan Menyusui (10 Lmkm)*. (Literasi Nusantara, 2019).
15. Li, C. M. *Et Al.* Associations Of Hospital Staff Training And Policies With Early Breastfeeding Practices. *J. Hum. Lact.* **30**, 88–96 (2014).
16. Saadeh, R. J. The Baby-Friendly Hospital Initiative 20 Years On: Facts, Progress, And The Way Forward. *J. Hum. Lact.* **28**, 272–275 (2012).
17. Menteri Kesehatan Ri. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 340/Menkes/Per/Iii/2010 Tentang Klasifikasi Rumah Sakit*. 1–60 (2010).
18. Taylor, E. C., Nickel, N. C. & Labbok, M. H. Implementing The Ten Steps For Successful Breastfeeding In Hospitals Serving Low-Wealth Patients. *Am. J. Public Health* **102**, 2262–2268 (2012).
19. Agampodi, T. C. *Et Al.* Barriers For Early Initiation And Exclusive Breastfeeding Up To Six Months In Predominantly Rural Sri Lanka: A Need To Strengthen Policy Implementation. *Int. Breastfeed. J. 2021 161* **16**, 1–12 (2021).
20. Rapingah, S., Muhani, N., Besral & Yuniar, P. Determinants Of Exclusive Breastfeeding Practices Of Female Healthcare Workers In Jakarta, Indonesia. *J. Kesehat. Masy. Nas.* **16**, 59–65 (2021).
21. Brady, J. P. Marketing Breast Milk Substitutes: Problems And Perils Throughout The World. *Arch. Dis. Child.* **97**, 529 (2012).
22. Va, B. *Et Al.* Creating Environments To Support Breastfeeding: The Challenges And Facilitators Of Policy Development In Hospitals, Clinics, Early Care, Education, And Worksites. *Matern. Child Health J.* **21**, 2188–2198 (2017).
23. Radzyminski, S. & Callister, L. C. Mother's Beliefs, Attitudes, And Decision Making Related To Infant Feeding Choices. *J. Perinat. Educ.* **25**, 18 (2016).
24. Jane Desborough., Julie P. Smith., A. P. The Ten Steps To Successful Breastfeeding Policy Review. *Breastfeed. Rev.* **27**, 15–28 (2019).
25. Hakala, M. *Et Al.* Maternity Ward Staff Perceptions Of Exclusive Breastfeeding In Finnish Maternity Hospitals: A Cross-Sectional Study. *Eur. J. Midwifery* **5**, 1–11 (2021).
26. Ragusa, R. *Et Al.* Factors Influencing Uptake Of Breastfeeding: The Role Of Early Promotion In The Maternity Hospital. *Int. J. Environ. Res. Public Health* **18**, (2021).
27. Amick, S., Savage, J., Brewer, M., Wallace, M. & Mckasson, S. Statewide Breastfeeding Education Program Improves Maternity Staff Knowledge, Attitudes And Self-Efficacy. *J. Community Public Heal. Nurs. 2016 24* **2**, 1–7 (2016).

Received: 02-09-2021. Accepted: 26-11-2021. Published online: 27-11-2021.
doi: 10.20473/amnt. V5i2SP.2021. 10-18. **Joinly Published by IAGIKMI & Universitas**