EVALUATION REPORT

EVALUATION OF THE "INFANT AND YOUNG CHILD FEEDING AND ESSENTIAL CARE" (IYCF+)

COMMUNICATION STRATEGY IN SURINAME

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Evaluation of the "Infant and young child feeding and essential care" (IYCF+) Communication Strategy in Suriname

Final Report/ Evaluation Synthesis

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ACKNOWLEDGEMENTS

This evaluation of the Infant and Young Child Feeding Communication Strategy, is the result of the excellent cooperation between the government of Suriname, the Bureau of Public Health (BOG) of the ministry of Health of Suriname and the technical support of the General Bureau of Statistics and UNICEF. Sincere appreciation goes out to the dedicated staff from the department of Family Health of BOG, STIBOSU, all hospitals and policlinic and the ministry of Health staff who made their selves available to provide information on the IYFC (communication) program.

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This evaluation report would not have materialized if the mothers, caretakers and others did not show their willingness to participate as respondents during the fieldwork.

We sincerely applaud their support and time in this process.

Patrick Matala

Program Manger UNICEF Suriname

ACRONYMS

ANC	Ante-Natal Care
BFHI	Baby Friendly Hospital Initiative
BOG	Bureau of Public Health
BCC	Behaviour Change Communication
BF	Breast feeding
BMS	Breast-Milk Substitute
BOG	Bureau of Public Health
CBO	Community Based Organization
C4D	Communication for Development
DAC	Development Assistance Committee
EBF	Exclusive Breastfeeding
EPI	Expanded Programme on Immunization
ERG	Evaluation Reference Group
FGD	Focus Group Discussion
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
IOM	International Organization for Migration
IYCF	Infant and Young Child Feeding
KAP	Knowledge, Attitude and Practice
KII	Key Informant Interview
LR	Labour Room
MCH	Maternal & Child Health
MICS-6	Multiple Indicator Cluster Survey- Round 6
MoH	Ministry of Health
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
PLW	Pregnant and Lactating Women
ToC	Theory of Change
SDGs	Sustainable Development Goals
SZF	State Health Insurance Foundation
TT	Tetanus Toxoid
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNHCR	United Nations High Commissioner for Refugees

EXECUTIVE SUMMARY

UNICEF Guyana and Suriname Country Office commissioned an evaluation to independently assess the Infant and Young Child Feeding (IYCF) Communication Strategy in Suriname and conduct a systematic and impartial examination of its relevance, effectiveness, efficiency, sustainability, and likelihood of impact.

This evaluation aims at informing decision-making for future programming, in the context of a poor country record with regard to exclusive breastfeeding (2.8%). It has been increasingly recognized that communication for Development is essential to build the resilience of national institutions, women and communities against the low breastfeeding rates as well as any and increased risks from non-communicable diseases such as cancers, diabetes and heart disease and obesity, added to the drive for change in infant feeding practices.

Primary users of the evaluation are management and programme staffs of UNICEF Guyana and Suriname Country Office, the Ministry of health of the Government of Suriname (MoH), other institutions and partners working in the nutrition sector in Suriname, regionally and globally.

Evaluation objective

Optimal infant and young child feeding is crucial for child survival and health, especially among those living in dire conditions. Poor IYCF practices were evident among Surinamese as shown by the MICS-5. Only 3% of children in Suriname were exclusively breastfeed before 6 months.

In 2017, the Bureau of Public Health of the Ministry of Health and UNICEF had committed to focus on communication interventions that would enhance child health and development, giving a specific focus to infant and young child feeding and essential care practices linked to the most common childhood diseases (IYCF+). Prior to the formulation of the IYCF+ communication strategy to ensure a strong evidence base for the development of the communication strategy, the Bureau of Public Health (BOG) collaborated with UNICEF on formative research into infant and young child feeding and essential care (IYCF+). The research incorporated findings from existing literature, and field research that explored caregiver behaviours and beliefs, capacity of service providers and relevant policies.

To address issues as mentioned above, the ministry of Health (BOG) with the support of UNICEF Suriname developed the Infant and Young Child Feeding (IYCF+) communication strategy. The main aim of the national IYCF+ strategy was to bring change in behaviors by motivating and empowering mothers and caregivers with increased knowledge of appropriate feeding and care practices and promoting development of an enabling environment that reinforces and encourages change. This enabling environment depends on the active support of close family members, on the effective encouragement and guidance of health workers, on a well-informed and supportive mass media and on positive social policies. Activities aimed at addressing misconceptions related to breastfeeding by providing one-to-one counselling sessions including home visits, group education sessions, maternal and child health and nutrition referral services (such as routine and supplementary immunization, antenatal and postnatal care), and providing regular maternal nutrition advice through follow-up visits with PLWs.

The IYCF communication strategy has diversified strategic partnerships and developed the capacity of Government and local partners, such as the MoH, Ministry of Social affairs, Community-Based Organisations, private hospitals and companies. The programme has trained government health care providers (nurses and midwives), PHC staff and IYCF educators on optimal IYCF practices, counselling and education methods, and the code of marketing Breast Milk Substitutes.

Evaluation Methodology and Analysis

Considering the IYCF Strategy programme design, the objectives and scope of the evaluation, as well as a lack of baseline data, the evaluation adopted a qualitative methodology. Central to this was the multiple case study design with embedded units of analysis. The evaluation team collected information about the communication strategy from key stakeholders, service providers, and end-users (pregnant and lactating mothers). Since the programme has expanded both at geographic and activity levels, the multiple cases encompassed units of analysis in view of different geographic areas, different durations of implementation, and different contexts.

Data collection methods were identified to respond adequately to evaluation questions, developed as per the OECD DAC Criteria for Evaluation. These included: (1) desk review; (2) semi-structured interviews with 37 key informants; (3) five focus groups discussions with 111 service providers; (4) 10 focus group discussions with 337 end-users benefiting from the Programme at different stages; and (5) e-questionnaire targeting beneficiaries of capacity development activities. Key informant interviews were also conducted with 32 non-beneficiaries. Data analysis consisted of analysing quantitative data from the questionnaires using frequencies, and a thematic analysis was conducted on the four types of qualitative data.

Throughout the analysis, the evaluation team also examined ways in which the IYCF communication strategy is progressing against the Theory of Change, developed for the purpose of this evaluation at the inception phase.

Main Findings and Conclusions

The evaluation found that the IYCF Communication Strategy is **relevant** while it can be further enhanced through a stronger alignment to national priorities and systems. The Strategy is **partially effective** in a sense that it has achieved results at activity and output levels yet fell short of achieving outcome level results. The programme design must explicitly consider the roles of duty bearers, such as men and fathers, and strengthen approaches for capacity development of service providers, influencing policies and addressing social norms.

The evaluation also found that the Programme is **efficient**. However, integrated approaches and engaging volunteers can further enhance not only efficiency but also the effectiveness. **Likelihood of impact** was noted in term of changes at individual level. The percentage of children who are exclusively breastfeed during the 6 first months of the life increased from 2.9% in 2010 to 8.9% in 2018. Changes at institutional level or nutritional status of children could not be determined while assessment against the Theory of Change indicated potential of contribution towards impact. **Sustainability** of the strategy in its current modality and approach is questionable, and there must be an articulated and phased plan for integration and institutionalization of the programme, capitalizing on the achievements and strengths.

Specific findings against the evaluation criteria are as follows:

- The services related to IYCF+ are being provided by trained and qualified nurses; they have been adequately trained on various components of IYCF+ including counselling of beneficiaries and other care givers;
- Most of the facility in-charge (76%) have responded that it is good to initiate the BF with an hour of delivery of the baby; however, staff of Wanica facility has more in-depth knowledge on early initiation of BF;
- When it comes to awareness, availability, display and access to communication materials on IYCF+, District Coronie has scored very poor; however, most of the facility in-charge has awareness about promotional materials related to IYCF+ such as TV/Radio spots, Poster, Newspaper etc.;
- Mothers stay at facilities provide opportunity for service providers to counsel her on various aspects of infant and childcare including BF, EBF, complementary feeding, immunization etc. Most of the facility in-charge responded that mothers are getting discharge from the facility within 24 hours; in some instances, as early as within 4 hours which put major challenge to implement IYCF+ activities at facility level;
- About 95% nursing staff do understand that BF has to be initiated within one hour of delivery; however, there are nurses who are not adequately trained on IYFC+ interventions have limited knowledge about early initiation of BF;
- About 97% nurses are well versed with the fact that mothers breast milk should be first liquid ought to be given to the newborn;
- Nurses in all five districts are well informed about the benefits of colostrum; they have been trained on the importance of colostrum and do counselling to the mothers also. Some of them were not very sure about the scientific reason for putting newborns on colostrum;
- The nurses and other facility level service providers are not very clear about on the duration during which BF should be continued; about 62% believe that it should be continued for first 6 month only. However, 28% responded that breastfeeding should be continued for 2 years or more;
- Service providers are quite aware on the correct time of introduction of complementary feeding i.e. after six-month. For knowledge on BF, EBF, complementary feeding etc., training on IYCF+ components (62%) followed by knowledge from nursing school (21%) are the major source of knowledge;
- During the evaluation study, the research team did observation on some of the critical indicators to understand the degree of compliance towards the promotional activities done at the facility level to improve the uptake and utilization of IYCF+ interventions. It was observed that display of IEC materials on IYCF+ in the maternity ward and information on use of “infant formula” at facility are the least used promotional activities accounting to about 35% and 32% of facilities respectively;

- 43% mothers responded that BF should be started within 1 hour of delivery; however, mothers have differential knowledge level regarding colostrum. Apart from indicated benefits of colostrum, mother's knowledge level is hugely influenced by local customs and practices which doesn't have correlation of scientific facts;
- Nurses are the key service providers who assist mothers on BF and allied information; on and average 51% mothers are being assisted by nurses/ health workers on BF and other IYCF+ activities followed by midwifes who accounts for about 21%;
- Health workers and elderly women within the family are most convenient support available at community level for providing assistance/ advise/ support on breastfeeding; about 35% responded positively on assistance provided by Health workers at community level and 26% are banking on the support received from the elderly women within the family;
- 264 mothers with children of 7 months to 2 years of age were interviewed to understand the knowledge, attitude and practices towards complementary feeding. Pulses (50%) are their preferred food supplement followed by infant formula (48%);
- About 40% mothers started supplementary feeding after 6 months and 18% mothers did it even before 6 months. Mothers mostly rely on doctors' advice (27%) for starting supplementary feeding to the babies; however other sources at community level also play important role in deciding the time of introduction of supplementary feeding;
- Babies are mostly fed 2-4 times with supplementary food in a day; however, 11% women feed the babies 6 times in a day. Hospital staff are the still key source of information on supplementary feeding; substantial proportion of mothers rely on community volunteers (12%) and internet (11%);
- Baby care booklets (42%) is widely available print material on childcare/ child feeding practices; leaflets (16%) and posters (17%) are also available for the use of mothers. The available IEC activities have played excellent role in influencing mothers KAP towards baby's nutrition; they are now well versed with nutritional requirement of the baby (44%) and practices hand hygiene while feeding their babies (12%);
- Traditional healers are not reliable when it comes to feeding practices; mothers don't refer them as having any influence at community level practices.
- The IYCF-Communication strategy offers the highest discounted benefits compare to the discounted costs. The estimated return on investment cost is 28.6 times more than the programme intervention costs.

The interventions implemented so far in the communication strategies have been envisioned as boon for promotive uptake and utilization of IYCF+ services, however, some of the components such as holistic engagement with the communities, delivery of accurate and scientific information by service provider, regulation of marketing and sales of milk substitutes etc. need to be monitored closely in order to derive commensuration outcomes from the interventions.

Summary of recommendations

Recommendations based on this evaluation are divided into short term (more operational in nature) and long term (more strategic in nature). These are also stratified by level, e.g. district and national levels.

1- Short-term recommendation

Review the IYCF communication strategy scope for an integrated and comprehensive Primary Health Care Programme covering IYCF, Early Childhood Development, newborn and childcare, antenatal and postnatal care, and mental health. Consider focusing on the first 1,000 days in a child's life with essential services that would ensure a healthy start.

2- Short-term recommendation in districts

Enhance the Programme design to influence outcome-level results such as: 1) providing mother-to-mother support that contributes to sustainability of the communication strategy; 2) Incorporating a "men's component" into the communication strategy where men will be targeted separately; 3) conducting regular capacity building and sensitizing activities targeting health service providers including NGOs.

3- Short-term recommendation in districts

Address gaps in monitoring, data and financial management. The current system does not capture all the necessary information to track achievements against the stated results. The Theory of Change developed for this evaluation can be used to refine the results framework and monitoring system.

4- Short-term recommendation in local pilot communities

Develop an exit strategy with concrete and phased actions, including capacity building, coaching and mentoring of community volunteers and partner staff. MoH can conduct capacity assessment to identify existing centres with the necessary and adequate capacity. The exit strategy should be accompanied with the recommended sustainability measures. (ref. to the Apoera project model).

5- Medium-term recommendation (National/strategic)

Conduct a thorough assessment of bottlenecks in existing structures and health systems within MoH to improve effective IYCF service coverage. Accordingly devise a plan to strengthen IYCF within existing Primary Health Care system platforms.

6- Long-term recommendation (National/Strategic)

Integrate Infant and Young Child Feeding into the National Health Strategy and support the implementation. This evaluation provides knowledge and learning for strengthening the national strategy and its implementation.

7- Long-term recommendation (National/Strategic)

Develop a plan for Infant and Young Child Feeding activities to be part of an integrated package of Primary Health Care services for children aged 0-2 years of age, encompassing newborn, child health, early childhood development and nutrition.

CONTEXT OF THE EVALUATION

1.1. Health systems in Suriname

Over the past decade, Suriname has made significant strides in reducing infectious disease related morbidity and mortality. However, each year Suriname loses 170000 productive life years due to ill-health and premature death. “Communicable diseases, maternal, neonatal, and nutritional disorders”, “Non-communicable diseases” and “Injuries” account for 27%, 58%, and 15% respectively. Non-communicable diseases pose a major challenge for the containment of cost in the health system. Suriname has yet to reach global targets for maternal and infant mortality and faces a significant burden of disease from road traffic injury and depressive disorders and suicide.

Inflation and an economic crisis have further put pressure on the health system and efforts are under way to further contain cost and optimize health service delivery. A recent assessment of health equity reports inequities in health status and prevalence of risk factors across ethnic, geographic, gender and socio-economic status. Non-communicable diseases including stroke, ischemic heart disease and diabetes, mental health issues including suicide, HIV, road traffic injuries and preterm birth complications are among the largest contributors to the burden of disease. Key risk factors are an unhealthy diet, insufficient physical activity, use of tobacco and alcohol, high blood pressure, domestic violence, incomplete vaccination, young maternal age and low antenatal care service uptake. Efforts are under way to mainstream the 2030 agenda for sustainable development within the ministry of health in Suriname and mapping the health and health related indictors in the national health policies and strategy plans.

1.2. Health Policies: Development so far

Suriname has fairly good development indicators however other confounding factors played a major role in recent times. The Multiannual Development Plan for 2012–2016 of the government of Suriname states that economic development forms the basis for social security and that social security stimulates economic growth.

The plan stresses policies to enable social protection for the population, especially for certain priority groups such as youth. In 2010, the Ministry of Sports and Youth was established and one of its accomplishments has been the construction of sports fields in various neighborhoods. In addition to the law on basic health insurance, two other major pieces of legislation regarding social security were enacted in 2014: the law expanding pension benefits, and the law establishing a minimum wage.

To address persisting inequities between urban, rural, and interior regions, and to tackle slum formation in peri-urban areas, the Multiannual Development Plan proposed several large investment projects to increase affordable housing, improve access to piped water, and promote local agricultural production. However, implementation was seriously hampered by the financial downturn in 2015, and a new, five-year plan is being developed.

In the recent approaches towards ensuring health of its citizens, Suriname emphasizes three key strategic areas which include reducing the burden of disease, addressing social determinants of health and strengthening of health system and services through primary health care. The Ministry of Health has identified two key policy areas in its Development Plan for 2017-2021. These are the Prevention and reduction of morbidity and mortality and availability and accessibility of quality health care for the whole population. Health tops the national agenda and is a pillar of the constitution and social protection in context of the current economic stagnation. Suriname has gone through important policy reforms in the last years to advance in the direction of Universal Health. In 2014, the Basic Health Care Insurance Act came into effect with the aim of providing health insurance coverage for the population under 16 and 60 years old and intended to improve access to services across all levels of care, while the working population is insured through employers' health insurance programs. In 2016, due to financial difficulties shown by private insurance companies that managed part of the insurance scheme, the management of this entire public scheme was transferred to the State Health Insurance Foundation (SZF), currently covering around 75% of the population.

Suriname has a fragmented but coordinated health system that covers the urban, coastal and interior regions of the country. A dedicated primary health service exists both for the population in the interior (Medical Mission) as well as the urban-coastal area (RGD). Implementation of projects and public health programs including health trend monitoring takes place through the Ministry of Health's Bureau of Public Health (BOG). Five hospitals serve the population, three of which are located in the capital. While the working population is insured through employers' health insurance programs; however, under the current policies and epidemiologic trends, costs are projected to outrun government expenditure and new models of healthcare financing as well as an emphasis on primary care and health promotion is being developed.

1.3. Key health development indicators

The international community shifted from the Millennium Development Goals (MDG) to the Sustainable Development Goals era, it is critical to promote universal health coverage (UHC) and equity as the central elements to advance global and regional prosperity. The implementation of the survives and thrives programme seek to address district disparity reduction and equity gaps which are the greatest threats to maintain the ongoing efforts for reducing child and maternal mortality and morbidity. These efforts will be sine qua non for Suriname achieving the Sustainable Development Goals (SDGs) 3. The key issues for children and women remain vaccine preventable diseases besides the major five common childhood illnesses – diarrhea, pneumonia, fever/malaria prevention, overweight malnutrition and new-born conditions – prematurity and birth asphyxia[1].

Yet progress in closing the gaps in health is still advancing. Significant inequalities in health, and other health social determinant (education, gender, gross national income per capita etc.) of key aspects of life persist between districts, poor and richest quintile and age groups - impacting children today and undermining the lives of tomorrow.

Suriname have made progress in improving overall child survival (Health and Nutrition) and equity in health. Over the last two decades, the Government of Suriname has implemented policies to improve access to basic health and Nutrition services.

However, inequities are still marked in specific areas. The 2019 holistic assessments of the health sector performance in both countries done with WHO-PAHO support, show widening inequities in human resource and coverage for health. This was a major talking point during the elaboration of the Universal Access to Health Services strategic plan in Suriname.

Overall access to healthcare services has improved but reduction in morbidity and mortality has been slow. There are also worrying disparities in mortality and coverage for key health interventions raising serious concerns about inequities in healthcare. Results from Human Development Index Report (HDI), Multiple Indicators Cluster Surveys (MICS) and administrative data from the Health Information Management System (DHIMS2) consistently show inequities in Under five mortality. The maternal mortality ratio (SDG 3.1) averaged 125 deaths per 100,000 live births in 2000-2013 Increase. This figure was 154 per 100,000 live births in 2010 and 139.8 in 2013 and based on the HDI data, the 2018 maternal mortality ratio averaged is 155 per 100,000 women. The leading causes were gestational hypertension and hemorrhage. (HDI Report 2018). In Suriname, the infant mortality rate in 2012 was 19 deaths per 1,000 live births and decrease to 17 deaths per 1,000 live births in 2018. The most common causes of mortality reported in children under 1 year of age were respiratory problems, fetal growth retardation, congenital diseases, neonatal septicemia, and external causes.

[1] UNICEF, et al. *Levels and Trends in Child Mortality Report 2017*. New York: UNICEF, 2017. https://www.unicef.org/publications/files/Child_Mortality_Report_2017

There is inadequate reporting of deaths in children under 1; thus, the mortality rate is probably underestimated. The under-5 mortality rate was 21 in 2012 and decrease to 19 deaths per 1,000 live births in 2018.

SDG 3 Key performance indicators progress:

Based on MICS-6 report, in Suriname the prenatal checkup coverage decreases from 94.9% in 2010 to 84.8% in 2018; 67.5% of pregnant women had four prenatal checkups; 92.3% of births took place in a health facility; and 92.2% of births were attended by trained health workers. Nearly 48% of women used some form of contraception in that year. Compare with 2010 data, we notice the reduction of 6%.
Neonatal tetanus protection Percentage of women age 15-49 years with a live birth in the last 2 years who during the pregnancy of the most recent live birth were given at least two doses of tetanus toxoid containing vaccine or had received the appropriate number of doses with appropriate interval prior to the most recent birth decrease from 16.2% in 2014 to 10.2% in 2018.

MICS-6 shows the decreasing of diarrhea prevalence. The percentage of children under age 5 with diarrhea in the last 2 weeks for whom advice or treatment was sought from a health facility or provider 61.0%.

In 2015, vaccination coverage was 89% for DPT3 and 94% for the trivalent vaccine (MMR1). The MICS-6 data show a decreasing of vaccination coverage. Full immunization coverage (SDG 3.b.1) 27.9%; Percentage of children age 12-23 months who received at least one dose of Inactivated Polio Vaccine (IPV) and the third/fourth dose of either IPV or Oral Polio Vaccine (OPV) vaccines at any time before the survey was 69.4%; Percentage of children age 12-23 months who received the third dose of DPT-Hep-Hib3 containing vaccine (DPT3) at any time before the survey was 73.9%; Rubella immunization coverage was 75.7%; Yellow fever immunization coverage was 68.2%; Measles immunization coverage was 58.3%[2].

In 2014, the recorded prevalence of human immunodeficiency virus (HIV) infection in the 15-49 age group was 0.9%. In 2000-2013, the disease remained undiagnosed in some 40% of people with the infection. Mortality from HIV/AIDS was 22.4 deaths per 100,000 population in 2010 and 16.4 in 2013. MICS-6 revelated that, the Percentage of women/men age 15-24 years who correctly identify the two ways of preventing the sexual transmission of HIV, who know that a healthy-looking person can be HIV-positive and who reject the two most common misconceptions about HIV transmission: 40.2%/41.5%

The estimated tuberculosis diagnosis rate rose from 58% in 2012 to 71% in 2018 the reporting rate was 28.6 per 100,000 population in 2013.

[2] *Multiple Indicator Cluster Survey Suriname July 2019*

HIV prevalence in TB patients declined from 34% in 2010 to 29% in 2018, but mortality in TB patients continued to be highly correlated with HIV infection. In 2011, the country began implementing directly observed treatment, resulting in higher treatment success, from 61% in 2010 to 75% in 2013.

Suicide rates have increased: in 2012, the rate was 26.7 per 100,000 population, far higher than the world average of 16 per 100,000 population. The male-female suicide ratio averages between 2 and 3 to 1, while the suicide attempt ratio is the reverse (0.7 men to 1 woman)[3].

Universal access to health care for pregnant women and newborns remains a pending challenge. Persistent deficiencies in access to health care are related to lack of access to insurance systems. Considerable inequalities exist within districts/regions, even in some of the wealthiest ones. But such inequalities on average takes a bigger toll on poor quintile. On the other hand, one key dimension of inequality within districts and regions is between men and women[4]. The MICS-6 and HDI data looks at the gender gap in opportunities, achievements and empowerment.

Despite gains made in the health sector during the last decade, there are stark disparities in health outcomes amongst Guyana and Suriname children based upon their exposure to violence and health services, their gender and ethnic group, and the stability of their economic and politic situation.

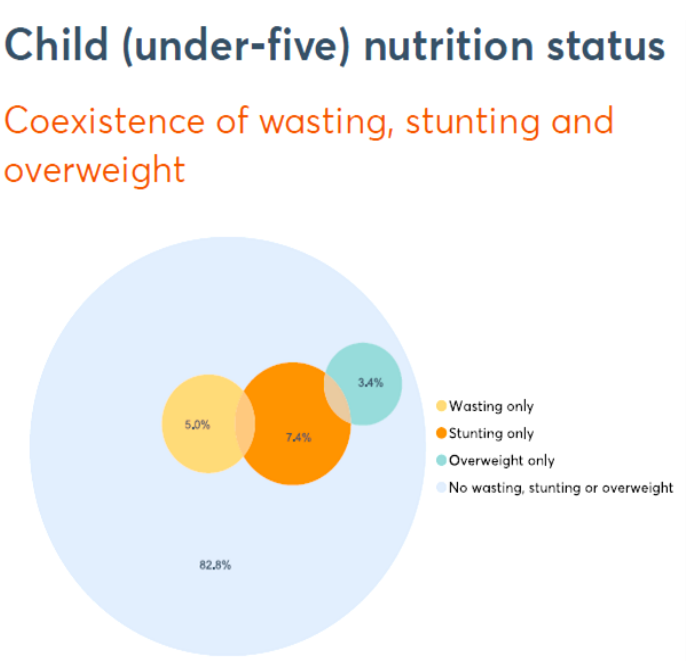
1.4. Nutrition development indicators

Maternal breastfeeding plays an important role in preventing diarrheal and other children diseases. However, the percentage of children exclusively breast-feeding during the first 6 months of life has not increased too much. It went from 2.8% in 2014 to 8.9% in 2018. Early initiation of breastfeeding (Percentage of most recent live-born children to women with a live birth in the last 2 years who were put to the breast within one hour of birth) was 51.9%.

The under 5 wasting prevalence (SDG 2.2.2) minus two standard deviations (moderate and severe) is 5 and minus three standard deviations (severe) of the median weight for height of the WHO standard is 1.0. Only 62.9% of children age 6-23 months received the minimum meal frequency of solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times or more during the previous day.

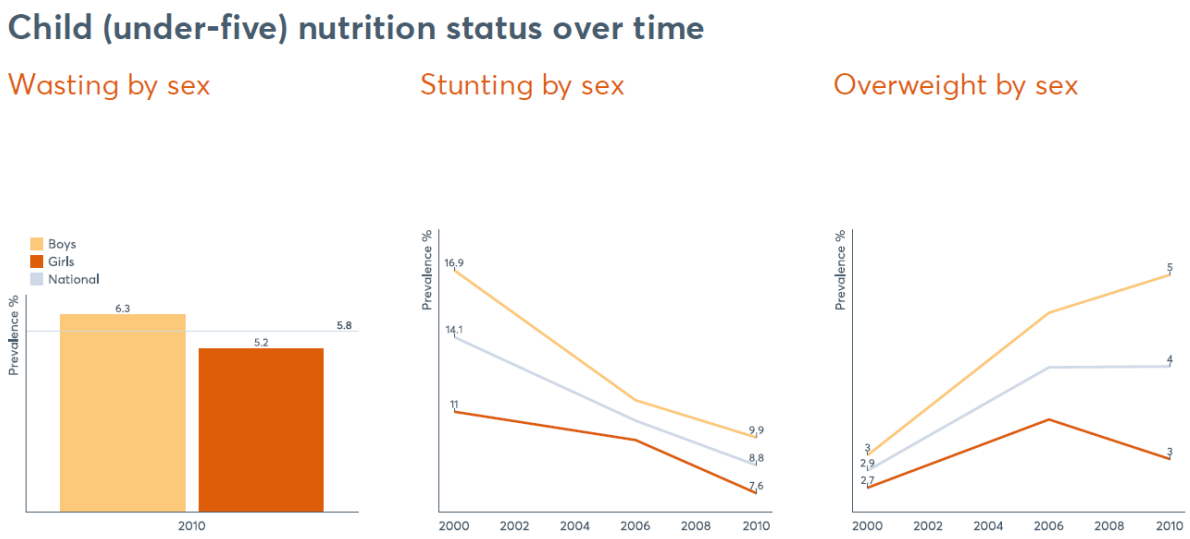
[3] *PAHO 2018 Annual report*
[4] *HDI, UNDP 2018 report*

A 2015 study into anemia for example in the interior of Suriname revealed an overall high anemia prevalence of 63% in children aged 1-5, especially prevalent aged 1-3. Food intake during the weaning period in the interior often lacks micronutrients, especially iron and calories.



Those findings were more common in Maroon than Amerindian children, indicating cultural influences (Zijlmans, et al., 2017). In Suriname obesity is an increasing and alarming concern, which has been largely unfunded. One in three women are obese and two-third are either overweight or suffer from obesity, while approximately 50% of men are obese or overweight in the age group 15-65 (Ministry of Health, 2014). Furthermore, 25% of people between the age 15-24 suffered from obesity which increased with age and 25 % also suffered from high cholesterol (Ministry of Health, 2014).

The wasting, stunting and overweight coexistence is more prevalent in boys than girls.



There is a lack of policies/regulations addressing breastfeeding and complementary feeding, as well as over and undernutrition. Sporadic initiatives have been promoted over the past few years, with the lack of a goal oriented multi-year plan to address the concerns.

Building on previous and current work supported by UNICEF on advancing exclusive breastfeeding the UNICEF and Ministry of Health IYCF programme interventions targets a mix of activities to prevent malnutrition in all its forms, including overweight and obesity targeting infants and young children. Specifically, the program aims by 2021 to contribute to the increase of (a) the proportion of early initiation of breastfeeding from 45% to 65%; (b) exclusive breastfeeding in the first 6 months from 2.8% to 10%; and (c) the proportion of children aged 6-23 months fed a minimum number of 5 food groups from 64% to 75%.

OBJECT OF EVALUATION- THE PROJECT

This section presents the programme design of the communication strategy of 'Infant and Young Child Feeding' (IYCF), which includes the integrated IYCF+ packages of services. The section also includes the Programmes package of services, target beneficiaries, model and progress.

2.1 Infant and Young Child Feeding communication strategy (IYCF-S)

Core package:

Infant and young child feeding (IYCF) communication strategy includes activities aiming at supporting, promoting and protecting optimal infant and young child feeding amongst infant and young children aged 0 to 2 years of age. Activities in support of the IYCF communication strategy include education, promotion, counselling, peer support, as well as the setup of IYCF guidance and policies. The initial core package of IYCF Communication strategy are listed below:

- ***Behavior change communication*** *(BCC):* the primary focus for BCC are mothers and influential members of the household including their partners, mothers, mothers-in-law and other relatives. These individuals interact with the child, often on a daily basis, and may either insist that the mother adopts a practice, or may take matters into their own hands- for example, by giving water to a baby under the age of six months even if the mother herself has become convinced that this is not necessary.
- ***Social mobilization****:* Social mobilization for IYCF+ focuses on the health sector, workplace, childcare facilities and community groups that influence childcare choices. The formative research revealed that health workers in particular can have a powerful influence over childcare and feeding choices, although obstacles sometimes existed in both the style of interaction with mothers and in the quality of the advice offered. The strategy therefore places significant emphasis on strengthening inter-personal communication especially between health workers, mothers and other family members. Practices in the workplace and childcare centers can also have a major influence on the feeding decisions that mothers make.
- ***Advocacy****:* Advocacy initiatives focus on ending government support for marketing artificial foods for babies, and on promoting implementation of the International Code on Breastmilk Substitutes and the Baby-Friendly Hospitals Initiative. It includes advocacy for the development of national guidelines on infant and young child feeding and care and for national maternity leave legislation that could enable more working women to make positive choices in favor of breastfeeding.

2.2 Beneficiaries of the IYCF Programme:

The IYCF communication strategy targets mothers, children, health care providers, community leaders, donors and government officials.

The main aim of the national IYCF+ strategy was to bring change in behaviors by motivating and empowering mothers and caregivers with increased knowledge of appropriate feeding and care practices and promoting development of an enabling environment that reinforces and encourages change. This enabling environment depends on the active support of close family members, on the effective encouragement and guidance of health workers, on a well-informed and supportive mass media and on positive social policies.

2.3 Management of the Programme:

The programme is implemented by the Ministry of health, led by the Ministry' Health and Nutrition Manager, who supervises staff officers including the IYCF Community Officers (in charge of the programme in communities).

The IYCF-communication strategy implementation plan focuses on ensuring BOG and relevant partners have the capacities to ensure effective management and delivery of the communication strategy.

The total Programme budget was: $US 44,964

2.4 IYCF Communication strategy history

Suriname was targeted by the LAC Regional Office as IYCF high risk country to be aligned to the Regional proposal on Improving infant and young child feeding practices as a strategy to prevent overweight and obesity (3-year program). The proposal focused on prevention of child overweight and obesity, while contributing to address malnutrition in all its forms, by prioritizing "double duty" actions focused on exclusive breastfeeding, and healthy early childhood nutrition practices. It aimed at developing a durable system in which exclusive breastfeeding will be rapidly increase and obesity and overweight will decrease thanks to an improved knowledge about healthy early childhood nutrition (including complementary healthy feedings).

This should be achieved through: 1) improvement of the enabling environment and system strengthening for the promotion of breastfeeding and appropriate complementary feeding based on formative research; 2) support of preventive measures for children attending early childhood development programmes; 3) development of capacity on counselling of caregivers in settings where infants and young children are cared for; 4) identification of systemic and behavioural gaps and bottlenecks through a comprehensive situation analysis;

5) support the government in addressing IYCF based on the gaps identified through nutrition activities targeting the policy environment, health care facilities, preschools and the community.

One of the key activities planned for getting/ generating evidences were the Evaluation of the government IYCF+ communication strategy implementation (supported by UNICEF). This evaluation should help for generating evidences to:

- **Identify the communication strategy bottlenecks on advocacy, social mobilization and communication for behavior change and its capacity to address them through:**
  - Pre and post Knowledge, Attitude, Practices and Behaviours (KAPB) survey regarding breastfeeding, complementary feeding including mothers' nutritional intake. Social norms and/or knowledge, attitudes and practices related to healthy and unhealthy dietary patterns, physical activity and overweight and obesity in children.
  - Review of existing laws, policies and strategic planning documents that are relevant for the prevention and care of any form of malnutrition, including of overweight and obesity.
  - Review of the existing capacity for the prevention of overweight and obesity in children, among UNICEF staff, government policy makers, health professionals, teachers and other relevant service providers.
  - A review of the level of "obesogenity" in rural and urban communities, schools and the home, including the availability and accessibility of healthy and unhealthy foods and the impact of urbanization on physical activity and access to healthy foods, and possibilities for physical activity in general.

- **Strengthen policy environment**
  - Support the ministry of Health with the implementation and monitoring of the Code of Marketing of Breastmilk Substitutes.
  - Support the national government in collaboration with nutrition actors present locally to strengthen systems to protect, promote and support breastfeeding and support complementary feeding.
  - Support the government to develop and implement social and behaviour change communication for exclusive breastfeeding.

- **Provide IYCF support at the health care facilities**
  - Support for early initiation and exclusive breastfeeding in maternity facilities increasing the adoption and coverage of the BFHI guidance.
  - Capacity building of health care providers in facilities for counselling on the protection, promotion and support for breastfeeding including for appropriate complementary feeding.

The list of IYCF communication strategy indicators were established to be monitored on an annual basis and shared with the Ministry of Public Health and other partners to assess how the strategy is progressing and if and which adaptation should be made. The IYCF communication strategy was planned to be evaluated as part of the overall CPD's evaluation (CPD ending in 2021), and findings shared with partners in the country, regional office and HQ. This will inform subsequent UNICEF's involvement in progressing the agenda and discussion on how to ensure an exit strategy while full sustainability is ensured. Part of the evaluation will also be provided by the findings of the MICS-6 survey which assessed behavioural, practice and attitude vis some vis the nutrition KPIs especially the breastfeeding.

2.5 IYCF Communication strategy Theory of Change

Though the IYCF-Communication Strategy does not have an explicit Theory of Change (ToC) to guide and monitor progress towards results. But the communication strategy contains overall outcomes and interim behavioral with factors that may influence the achievement of results outline in the IYCF communication strategy.
While conducting the evaluation, a better understanding of the IYCF communication strategy and its associated elements and processes allowed the evaluation team to better visualise the IYCF-communication strategy results matrix was used as a theoretical framework to define and/or validate the following aspects associated with the communication strategy as well as the related evaluation questions.

a. **The nature and scope of the IYCF-Communication Strategy** (relating mainly to the relevance, effectiveness, and sustainability of the strategy): This was achieved through examining: (i) the IYCF Communication aim and strategic direction; (ii) the Strategy-promoted joint collaboration and partnerships in order to reach established objectives; and (iii) the IYCF strategy's governance structure and mechanisms.

b. **The chain of results and associated causal pathways of the IYCF-communication strategy** (relating mainly to the effectiveness, efficiency, and likelihood of impact of the strategy): This was achieved through examining: (i) key inputs leveraged to help implement the strategies' activities allowing to achieve the outputs and outcomes of the strategy and ultimately its likelihood of impact; and (ii) the delivery modalities that the strategy relied upon to achieve its intended results.

c. **The conditionality and assumptions that underline the achievement of results** (relating mainly to the effectiveness, efficiency, and sustainability of the communication strategy): This was achieved through examining/validating: (i) the conditions that have been built into the IYCF-strategy structure; (ii) the Programming principles and expected stakeholder contributions;

(iii) the assumptions that reinforce the proposed chain of results; and (iv) the risks associated with the assumptions for the transition between and across levels of results that could have potentially undermined Programme achievements.

The national IYCF+ communication strategy that has been implemented since 2014 with the support of UNICEF Suriname focused on following outputs:

- BOG and partners have increased capacity to implement communication strategy;
- Improved inter-personal communication between health workers, mothers and family members;
- Public information on infant feeding and essential care issues is widely available;
- Partnerships mobilized to expand channels for engaging families on IYCF+ issues;
- Public information on why the sale of infant formula from health facilities should end is widely available;
- Partnerships mobilized to develop a national code on the marketing of breastmilk substitutes;
- Partnerships mobilized to promote maternity leave legislation;
- Research into injury causes completed (the impact of accidents on children, and advocate for a national injury prevention strategy.

Table 1: Outcomes and targets for the IYCF+ communication strategy

Indicators	Current (MICS 2010)	Target End 2015 (MICS 2015)	Target End 2020 (MICS 2018)
Early initiation % women who began breastfeeding within one hour of delivery.	45%	55%	80%
Exclusive breastfeeding: % babies aged 0-5 months who are exclusively breastfed.	2.8%	4%	18%
Continued breastfeeding: % of children aged 20- 23 months who are still breastfeeding	15%	18%	50%
Complementary feeding: % infants aged 6-23 months who received minimum number of meals.	64%	70%	90%
Responding to pneumonia: % of caregivers who can identify two danger signs of pneumonia.	10%	50%	80%
Treating diarrhea: % children with diarrhea who are given ORS or approved home treatments.	72%	82%	90%

The formative research, which worked as baseline for inception of communication strategy, clearly indicated that the attitudes and beliefs of family members and health workers, workplace practices and government policies influence childcare choices made by mothers and other caregivers. The communication strategy aims to address these issues by motivating and empowering mothers and caregivers with increased knowledge of appropriate feeding and care practices and promoting development of an enabling environment that reinforces and encourages change. This enabling environment depends on the active support of close family members, on the effective encouragement and guidance of health workers, on a well informed and supportive mass media and on positive social policies.

3. PURPOSE, OBJECTIVES, SCOPE, EVALUATION CRITERIA, AND USE OF THE EVALUATION

3.1. Purpose

As specified in the Terms of Reference (ToR), the purpose of this evaluation is to independently assess the IYCF-Communication Strategy, supported by UNICEF and implemented by the Ministry of health through the BoG in the target communities. In particular, the evaluation aims at conducting a systematic and impartial examination of the Strategy's performance, including the relevance, effectiveness, efficiency, and sustainability of the IYCF communication strategy.

This evaluation is primarily intended to support the decision-making process of the UNICEF Suriname Office and the Ministry of Health to examine IYCF communication strategy performance and inform future health and nutrition programmes in Suriname. The secondary audience includes relevant institutions working in the nutrition sector in Suriname, including BoG, the Medical Mission, nutrition and health partners, as well as donors.

3.2. Objectives

The specific objectives include:

a. To assess the **relevance** of the IYCF-Communication strategy (with integrated IYCF+ services for behavioral targets components) in the current context in Suriname and its national priorities, including those in the context of the implementation of the health sector strategic plan. To assess the relevance of IYCF-communication strategy design to achieve the expected results, taking into account the appropriateness for and social acceptability by children, PLWs, caretakers and communities.

b. To assess the **effectiveness** of the IYCF-communication strategy and to measure to what extent the communication strategy has achieved its stated objectives and any intended and unintended effects. These include behaviour change among PLWs in terms of initiation of breastfeeding, exclusive breastfeeding, continued feeding and introduction of safe and appropriate complementary foods from 6 months of age. To also assess the Programme equity and targeting.

c. To assess the **efficiency** of the IYCF-communication strategy and to measure to what extent the communication strategy has used resources (human, financial, and others) in an efficient manner, and if the achieved results justify the resource. To also assess if UNICEF and partners pursued options to achieve efficiency, e.g. integration with other relevant interventions (e.g. referrals for immunization-DALY).

d. To assess the **sustainability** of the IYCF-communication strategy and its results, considering the likelihood of communication strategy sustenance in the absence or reduction of ongoing UNICEF and donor support. This is to be done by identifying the degree to which the IYCF-communication strategy has built on existing institutional and local capacities, and a potential exit strategy.

In the end, the evaluation will articulate lessons learned on the strategic direction of the IYCF-Communication strategy and operational and technical Programme aspects, so as to improve future Programming of activities at the national and district levels.

It is important to note that the ToR specifies the need for the evaluation to measure the extent to which the Communication Strategy has had an impact on the target population. However, given the lack of baseline data and further to related discussions with UNICEF officials during the inception period, the current evaluation did not attempt to measure the Programme impact but rather examine the **likelihood of impact**. This was achieved through assessing the enablers and contributing factors associated with the Strategy's success.

3.3. Scope

The evaluation covers the full range of activities implemented within the context of the IYCF-Communication Strategy, supported by UNICEF and implemented by the Ministry of Health through BoG for the period extending from April 1, 2012 to December 31, 2018, in five (5) districts considered as targeted geographic areas as specified in **Map 1**.

3.4. Evaluation Criteria and Questions

The evaluation is structured around the five standard Organization for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) evaluation criteria. **Table 2** below shows how these Criteria applied within this evaluation:

Table 2 - Application of evaluation criteria

Relevance	The planning, design and implementation processes of IYCF-communication strategy in relation to responsiveness and alignment with national priorities and needs, as well as UNICEF –in-house strategies, policies and International guidance and policies related to IYCF and IYCF-E (including IFE Core group OPS, WHO global strategy UNICEF programming guide etc.).
Effectiveness	The success or otherwise of IYCF-Communication Strategy in achieving its stated objectives and any intended or unintended effects. Associated strengths, weaknesses, and evidence of innovation. Extent of equity achieved by the Strategy.
Efficiency	The extent of resources allocated and utilized to achieve the desired (stated) communication strategy objectives. The degree of control exercised over the quality and quantity of outputs. Efforts made at the national level to leverage pre-existing results, partnerships,
Likelihood of Impact	The IYCF-P enablers and factors contributing to its long-term effects.
Sustainability	The extent to which the results of the IYCF-P have generated effective partnerships and strengthened national capacity. The extent of institutionalization of the Programme within the Ministry of Health.

Based on these evaluation criteria, the evaluation questions and sub-questions mentioned in **Appendix A** were considered. These questions and sub-questions guided the data collection and analysis work throughout the evaluation process and were also used to test and fine tune the Programme results framework developed in the inception phase.

Photo: Inauguration of the BFH in Nickerie Suriname

© Mahogany Neede, UNICEF Suriname

4. EVALUATION METHODOLOGY

The overall design of this evaluation is based on the use of the strategy's result framework and Theory of Change (ToC), as articulated in the previous section. The evaluation uses the IYCF communication strategy result frame to assess: i) how the IYCF-communication strategy operates affect the performance; ii) whether or not the proposed logic of the strategy holds; and iii) whether the assumptions made in terms of external factors and conditions needed to enable and sustain change are valid, and if not, how such discrepancies affect performance of the IYCF communication strategy.

The evaluation design (post-test) was also applied while planning data collection which included multiple sources of evidence including: (1) records and documents reviewed through a desk review; (2) semi-structured interviews with key informants; (3) focus groups discussions with service providers (Doctors and nurses); (4) focus group discussions with mothers-fathers-caregivers benefiting from the IYCF strategy at different stages; and (5) questionnaire targeting beneficiaries of IYCF capacity building activities.

4.1 Evaluation approach

For the evaluation study, mix-methods of research methodology was adopted. This method is evidently most suitable; by mixing both quantitative and qualitative research and data, the study intends to provide in breadth and depth of understanding and corroboration. One of the most advantageous characteristics of conducting mixed methods research has been the possibility of triangulation, i.e., the use of several means (methods, data sources etc.) to examine the same phenomenon. Triangulation allows to identify aspects of a phenomenon more accurately by approaching it from different vantage points using different methods and techniques. Successful triangulation has led to careful analysis of the type of information collected by each method, including its strengths and weaknesses.

The applied methodology has ensured that the information's' collected are valid, reliable and sufficient to meet the evaluation objectives and that the analysis is logically coherent and complete (and not speculative or opinion-based).

Through this methodology, the team worked on collecting information from different perspectives including those of key stakeholders, service providers, and especially from mothers, fathers and caregivers of 0-2 years children including nurses and midwifes and doctors. Structured questionnaire was used for each category of target and triangulation principles (utilizing multiple sources of data and methods) will be applied in order to validate findings.

Descriptive statistical techniques are applied in the data analysis; notably, frequency measurement (absolute frequency, relative frequency, rate, ratio), measurement of central trends (mean, median, mode) and Measurement of dispersion (variance, standard deviation, coefficient of variation etc.

For each qualitative variable pertaining to exclusive breastfeeding, the environmental determinants, educational determinants, motivational determinants, and institutional determinants that affect each of them were taken in account.

4.2 Targeted Geographic areas

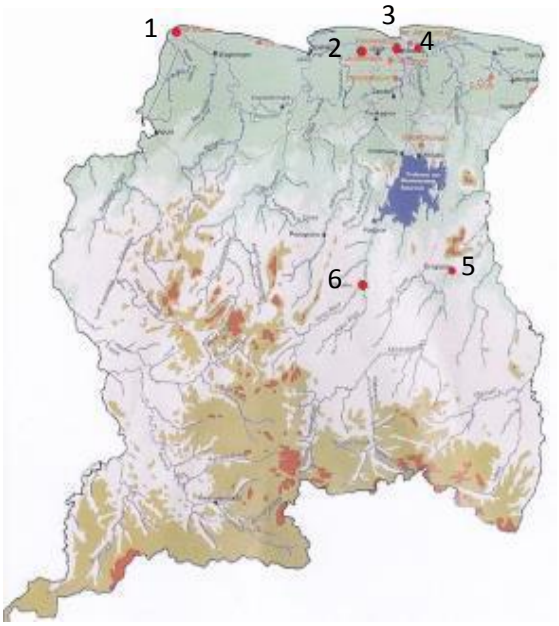
Suriname is divided in ten administrative districts: 2 urban districts of Paramaribo (the capital) and Nickerie, 6 coastal districts area (Wanica, Commewijne, Coronie, Saramacca, Para and Marowijne) and 2 districts in the interior (Brokopondo and Sipaliwini). The urban districts occupy 0.5% of the country's territory and contain 70% of the population. The districts are further divided in 62 resorts. Interviews were conducted at the Hospitals & Clinics listed in the table given below. These were selected because they met the core location criteria and were also associated with serving particular ethnic communities.

Table 3 – Targeted geographic areas

S. No.	District	Location	Fitting selection criteria	Clinics
1.	Paramaribo	Urban/Coastal	Yes	4 Hospitals & All 12 RGD Poly Clinics
2.	Nickerie	Urban/Coastal	Yes	1 Hospital and All 06 RGD Poly Clinics
3.	Saramacca	Coastal	Yes	All 04 RGD Clinics
4.	Wanica	Coastal	Yes	All 09 RGD Poly Clinics
5.	Coronie	Coastal	Yes	01 RGD Poly Clinic & HH interview (mothers/ caregivers to cover the sample size) on random basis
6	Brokopondo	Interior	No	
7	Para	Coastal	No	
8	Marowijne	Coastal	No	
9	Sipaliwini	Interior	No	
10	Commewijne	Coastal	No	

The districts of Para, Brokopondo, Marowijne, Commewijne and Sipaliwini were **excluded** because they didn't meet the evaluation criteria.

Figure 1: Location and distribution of the study sites in Suriname



4.3 Evaluation design

The evaluation is a facility-based study of behavior determinants influencing community level knowledge, behaviour and practices pertaining to infant and young child feeding and essential care (IYCF+) in selected geography. The mix-method approach was applied. There were mix of open and close -ended questions for mothers and caregivers (and other community level influencers like community leaders, religious personalities etc.) about IYCF+ issues IYCF baseline data is not available, the evaluation design used were non-experimental with post-testing only.

x O

X = Intervention
O = Observation

4.4 Sampling plan

The initial sample size will be calculated using the following formula:

$$n \geq \frac{Z^2 \times pq}{(d)^2}$$

- n = sample size
- p = proportion of the target population with the characteristic
- q = presumed proportion of the target population not having the characteristic studied
- d = absolute desired degree of precision. Imprecision deviation that is accepted is 0.05
- Z = confidence coefficient

Breastfeeding prevalence: 2.8%

= 0, 28 et q= 1 - 0,28 = 0,72
z = 1,96 (95% of confidence)

$$n \geq \frac{Z^2 \times pq}{(d)^2} = \frac{(1,96)^2 x\ (0,28 \times 0,72)}{0,05^2} = 307$$

Taking into account also the 10% of the cases of refusal and possible non-respondents, this number will be increased to **337** households/ Caregivers.

[1] ULB: Evaluation course, module developed in 2015. Ms Dramay

Source: Simple size for estimating a population proportion

Considering the breastfeeding prevalence rate of 2.8% and taking into account also the 10% of the cases of refusal and possible non-respondents, this number will be increased to **337** respondents.

4.5 Evaluation study cohort

Key respondents were the mothers, fathers, or caregivers of children (within family) of 0-2 years of age and service providers like nurses & midwifes and doctors. The limit of the age-group has presumably reduced the possible recall bias. Other community level influencers like community leaders, religious personalities etc. were also sampled to maintain the heterogeneity on responses pertaining to community level knowledge and practices.

Attention was paid to Coastal areas where there were ethnic clusters in order to get a socio-cultural perspective. Random and purposive selection of respondents done at Hospitals & Clinics and homes only in (Coronie) mothers/care givers/stakeholders according to the distribution of people in these areas.

4.6 Target Population

For the evaluation purpose, below sets of target groups identified as data points i.e. Primary target group:

- Mothers of Children below 6 Months
- Mothers of Children 6-23 Months
- Service providers Health workers (Doctors, Nurses, Midwives)

In addition, to assess the relationship between interventions and the impact, qualitative data also gathered from:

Secondary target group: Government officials at district and Sub-District levels from BOG:

- District and Sub-District level project managers and supervisory cadres for service providers

Tertiary Target group (Other family and community Influential, decision-makers, caregivers etc.):

- Fathers of Children aged 6-23 Months
- Mother-in-Laws
- Community leaders, opinion leaders, religious leaders from the locality

Table- 4 Number of Respondents Service providers and mothers/ care givers/ fathers

S. No.	Name of District	No. of Hospitals (a)	No. of RGD Poly Clinics (b)	Total no. and percentage of coverage (d) = a +b	No. of service providers	No. of Mothers/ care givers
1.	Paramaribo	4	12	16 (43%)	48	145
2.	Wanica	0	09	09 (24%)	27	81
3.	Saramacca	0	04	04 (11%)	12	37
4.	Coronie	0	01	01 (3%)	3	10
5.	Nickerie	1	06	07 (19%)	21	64
Total		**05**	**32**	**37 (100%)**	**111**	**337**

4.7 Data Collection Method and Tools

As mentioned above, data and information was collected using a combination of the following methods targeting the different project counterparts/stakeholders: (1) records and documents reviewed through a desk review; (2) semi-structured interviews with key informants; (3) focus groups discussions with service providers; (4) focus group discussions with end-users benefiting from the IYCF strategy at different stages; and (5) e-questionnaire targeting beneficiaries of capacity building activities at the Ministry of Health.

Documents Review

A thorough review of relevant plans, strategies and documents, global standards, and Programme reports was conducted as described in **Appendix xxx**. Documents included IYCF SBCC, Strategy agreements, reports, national plans, regional plans, progress reports, scientific literature, and grey literature. Content analysis was adopted to capture the essential information from the documents in order to answer the evaluation questions. For each of the OECD criteria and research questions, the evaluation team attempted to provide an answer based on documents reviewed, as relevant.

Key Informant Interviews (KII)

Semi-structured interviews (face-to-face and/or by telephone) were conducted with selected key informants to collect information concerning key questions and sub-questions of the evaluation. **Appendix xxx** includes the interview questions.

Key informants were selected in a non-random purposive manner based on information provided by UNICEF and The National Bureau of Statistic. A snowball sampling method was adopted whereby key informants that were recommended by other informants were considered and interviewed. The list of stakeholders that were interviewed is provided in **Appendix xxx**. In total, 32 key informants were interviewed from different hospital and clinics.

Focus Group Discussions (FGDs)

Another main data collection method consisted of conducting focus group discussions (FGDs) with service providers and end users. As part of this method, data and information was collected about each context and unit of analysis, as follows:

Focus group discussions with service providers:

Within each of the selected geographic areas, one focus group discussion was conducted with service providers. Service providers are considered to be staff members of entities that are providing the IYCF service as part of a team in a certain area. Seventeen (17) focus group discussions were conducted with a total of 111 participants as indicated in Table 4 above.

Participants included coordinators, medical doctors, educators, and nurses. Each focus group included 3 to 11 participants. Information that serves to answer questions in **Appendix XXX** was collected to assess the service providers' perceptions about the Strategy's relevance, effectiveness, efficiency, likelihood of impact and sustainability.

The following selection criteria were applied to select participants of focus group discussions:

- Service provider from selected clinics
- Service provider from CBO/local partner/health care provider/hospital who is part of the team providing support in that particular geographic area
- Service provider who is willing to participate
- Service provider who has been engaged in the IYCF strategy implementation since at least 6 months before the end of the scope of this evaluation.

Focus group discussions with <u>end users:</u>

Focus group discussions were conducted with end-users that benefited from the IYCF Communication Strategy in the selected geographic areas. Mothers/fathers and home care-givers end-users who have participated in any of the IYCF communication strategy activities including counselling, education, provision of nutrition support, or provision of in-kind incentives, were invited to participate in the focus group discussions.

Forty (40) focus group discussions (eight in each of the selected geographic areas/units) were conducted with end-users that benefited from the IYCF-Communication Strategy. End-users that benefited both fully and partially from the different activities of the strategy were invited. This is to ensure that different levels of interventions (awareness, counselling etc.) were captured in the focus group discussions. A list of women who are currently breastfeeding and with infant less than 24 months of age was requested from the clinics, of which end-users were selected randomly and invited to attend.

Eligibility criteria for participants in the noted focus group discussions include:

a. Mother of infant(s) less than 24 months of age at the time of the execution of the IYCF communication strategy;
b. Mother who benefited partially from the IYCF-Communication Strategy (education). It is understood that information is not available about mothers who have attended education sessions at the clinic;
c. Mother who benefited fully from the IYCF-Communication strategy (counselling, education, visits etc.).
d. Mother who has been living in the same area for the last 6 months of the year 2020.
e. Mother who is willing to participate.

Although it is understood that the IYCF Communication Strategy has targeted community members other than mothers, the evaluation focused on collecting information from mothers as the primary beneficiaries of the Programme. Invitations were extended to members of the family that are considered influencers of decisions related to infant and young child feeding. These included fathers, mothers, and other members of the family that may have an impact on a mother's decision to feed her infant/child. However, as evident from attendance sheets, no males attended the discussions; only female influencers accompanied the mothers.

In total, 337 beneficiaries, with an average age of 31.49 years, participated in 40 focus group discussions as shown in **Table 5 below**. Seventy-seven (165) (49%) of the mothers who participated in the focus group discussions were breastfeeding at the time of the interview. **Appendix xxx** includes the topic guide for the focus group discussions with mothers.

Table 5 - Focus group participants with end users

#	Location	Date	# of Mothers and Caregivers interviewed	Average age of mothers interviewed	Average # of children	# of women who are currently breastfeeding
1	Paramaribo		145	31.25 years	2.02	68
2	Wanica		81	28.12 years	3.19	37
3	Saramacca		37	32.14 years	2.01	29
4	Coronie		10	36.8 years	3.21	6
5	Nickerie		64	29.17 years	2.12	25
Total			**337**	**31.49 years**	**2.51**	**165**

The KAP questionnaire (**Appendix xxx**) tested the core components of the IYCF-communication strategy capacity building activities at the community level. Its development was based on the training material provided by the MoH. Informed consent was obtained from all respondents either by telephone or electronically. No names or other identifiers were collected, and questionnaires were anonymous. The questionnaires were completed, and data was entered on excel worksheet for analysis. Descriptive statistics were conducted, and differences in KAP across analytical units were explored as depicted in **Appendix xxx** and under the 'Results' section below.

4.8 Evaluation Process

The evaluation included three phases, as follows:

a. Design Phase

This phase included:

- A desk review of all relevant documents available
- Stakeholder mapping – This includes the mapping of the main stakeholders of the IYCF-Communication Strategy interventions.
- The development of the IYCF strategy Theory of Change
- The finalization and refinement of the list of evaluation questions
- The development of the data collection tools
- The development of a data collection and analysis strategy as well as a concrete work plan for the field phase

b. Field Phase

After the design phase, collection of the data required was undertaken in order to answer the evaluation questions as agreed upon at the design phase. **Appendix xxx** describes the actual timeline for data collection.

Field research was designed to fill gaps in knowledge and understanding that was not obtainable from the literature review. Thus, it aimed to supplement and expand understanding of existing knowledge.

c. Analysis and Synthesis Phase

The evaluation analytical plan consisted of analysing quantitative data from the KAP questionnaires and four (4) types of qualitative data: (i) documents data; (ii) key informant data; (iii) focus group data; and (iv) structured interview data.

Throughout the analysis, an explanatory approach was adopted to describe and explain the way in which the case (the IYCF-Communication Strategy) is functioning using the generated theory of change. Data from FGDs within the first locality were triangulated/validated with other data sources including KIIs, the KAP survey, direct observation, and the document review. This process aimed to generate preliminary patterns for that particular case described through the theory of change and answering the OECD criteria. Questions were added/modified further to the results of the analysis. Results of the analysis from the different contexts and units of analysis were compared within the same context.

To analyse the quantitative data associated with the questionnaire, frequencies were calculated and tabulated. Descriptive statistics were computed.

For the analysis of the qualitative data, the thematic approach was adopted. The process consisted of the following steps:

i. Data collection

Data for IYCF+ evaluation was collected through a structured, standardized questionnaire for mothers and caregivers and In-depth Interview & short interview schedule for Health Workers which included Duty Bearers, Nurses & Midwives in Hospitals/Polyclinics and Media Persons, NGOs/Key Influencer and Policy Maker respectively that will include qualitative data:

- Mothers with children aged under 6 months through structured questionnaire.
- Mothers with children aged from 6 months to 2 years.
- Health workers.
- Media Groups/key influencers/policy makers.

Following methods adopted to collect the data through prescribed tool:

- Field observations;
- Key informant interviews;
- Focus Group Discussions (FGDs) with duty bearers, mothers, health workers, community members, NGO's etc.
- Beneficiary surveys (Women's and care givers);
- Data analysis and documentary research.

Most of the tools were aligned to an android platform KoBo Collect. The field team (National Bureau of Statistic) collected data based on the field movement plan and uploaded it on the said IT platform from where data sheet downloaded through appropriate statistical software.

All interviews were translated into English and Dutch for the analytical phase. Interpretive techniques suitable for explaining qualitative data were used, including content analysis, and identification of trends and emerging themes which were further explored through sorting and computing using Microsoft Excel.

ii. Data Review

Before starting the analysis, data gathered from the different sources was read thoroughly to gain a better understanding of the content. Initial impressions and remarks were noted and referenced as per the data source.

iii. Data Organization

To make the collected data manageable and easy to navigate, data was grouped by data collection method, evaluation measures and questions asked, and responding groups.

iv. Data Coding

Under each of the research questions, preliminary categories/themes were identified and coded prior to data analysis. These categories/themes and related codes were then reviewed and refined while analysing the data, taking into consideration the common trends, patterns, and ideas that appeared repeatedly throughout the data.

v. Data Interpretation

Data analysis and data interpretation was based on the theory of change (ToC) and OECD criteria as described under above.

To ensure data quality all possible validation checks are taken in account during data collection as well as analysis. The analysis is done on the SPSS 12.0 software and MS Excel. Data cleaning has also been done within permissible range of deviation.

The analysis consisted of calculating the central tendency and dispersion measurements for quantitative data and the chi-squared homogeneity test for qualitative data to prove whether populations are derived from homogeneous groups and to interpret the differences. Further, inferential statistics was applied to verify the assumptions: Z-Test to compare the proportions and averages found in comparison with other available survey results MICS-6 and IYCF standards

The team (Consultant and Bureau of Statistic) conducted analysis simultaneously as data was being collected and information was generated progressively. As described above under section, the team started with analysis for the first case under one context and unit of analysis and moved forward for each case progressively to describe the case using the theory of change and answering the OECD criteria.

Using the thematic approach, the analysis process consisted of completing the list of the key categories and themes, followed by the identification of similarities and differences in responses from the different target groups.

The relationships between the different categories/themes were examined to determine how they are connected and how they influenced the IYCF-Communication strategy implementation and achievements as guided by the theory of change.

After preliminary analyses were completed, a debriefing presentation on the preliminary results of the evaluation was provided to the MoH, GBS and UNICEF team officials, with a view to validating preliminary findings and testing tentative conclusions and/or recommendations.

4.9 Strategy for ensuring Data Quality

To deliver credible and quality IYCF-Communication Strategy evaluation deliverables, the following was conducted:

1. Developing standardized protocols for data collection
2. Training GBS data collectors to administer Key Informant Interviews (KII) and Focus Group Discussions (FGDs) according to the protocols
3. Recording interviews where possible
4. Coding all data and storing it on a password-secured central drive
5. Following a standardized procedure for data transcription
6. Conducting random checks to ensure accurate transcription and translation
7. Triangulating data across multiple interviewers, multiple data collection points, and across methods
8. Validating main findings with key stakeholders including UNICEF, MoH, and GBS at the end of data compilation and analysis

The observations made during pilot testing were incorporated to ensure suitability of tools in study context. During the pilot testing, the team prepared a “quality assurance checklist” that included steps taken to ensure data quality. In addition, field supervisor for the data collection teams observed data collection activities to help ensure that data collection is conducted as per the approved study protocol and defined procedures.

4.10 Strategy for Ensuring an Ethical Approach

The evaluation was implemented in line with the following ethical principles and standards:

- UNICEF Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis (CF/PD/DRP/2015-001)
- The Belmont report on “Ethical Principles and Guidelines for the Protection of Human Subjects of Research” developed by the National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research in 1978
- United Nations Evaluation Group (UNEG) Ethical Guidelines for Evaluation (UNEG, 2008)

Throughout the evaluation, the main principles emphasized while conducting interviews, meetings, and focus group discussions with the concerned participating stakeholders include:

1. Being sensitive to beliefs, manners and customs of participants
2. Acting with integrity and honesty with participants
3. Ensuring a respectful communication and contact with participants
4. Protecting the anonymity and confidentiality of individual information
5. Obtaining informed consent of each concerned individual to be interviewed through providing him/her with a printed statement that will inform about the following:
   a. The conduction of an evaluation;
   b. The purpose of the evaluation;
   c. The procedures to be followed during the interviews;
   d. The data and information are collected solely for the purpose of the evaluation and will be presented in a way that will not allow linking a specific piece of information to an individual;
   e. That the participant is free to ask questions and may refuse to participate; and,
   f. That the participant has the right to end the interview at any point in time without any implications.

4.11 Limitations

The main limitations associated with the evaluation design included:

- The inability to assess Impact in the strict OECD/DAC sense of the term in view of the absence of the needed baseline data; the strategy likelihood of impact was investigated through examining related enabling and contributing factors.

In addition, the following challenges were encountered during the evaluation:

- Limited collaboration of a few key stakeholders; however, these were replaced by other key stakeholders that were deemed of equal relevance.
- The lack of participation from males in focus group discussions. During focus group discussions with end-users, 85% participants were all females and although influencers including husbands were invited, however only 15 males were part of the focus group discussions.
- The bias of having information from mothers that were willing to participate in the focus group discussions. Although the evaluation randomly selected mothers benefiting from the IYCF communication strategy (both partially and fully), however, not all those invited attended and therefore this might have implied that those who were present are those who were more engaged in the communication strategy. The participation of these particular mothers may have skewed results related to Strategy likelihood of impact.

- The challenge of finding non-beneficiaries given the lack of centers that are not targeted by the Strategy in the same geographic district considered within the context of the evaluation.
- The challenge of retrieving financial data to help in the cost efficiency evaluation. The evaluation team found it very hard to compile financial information in a format that is analyzable including information organized by year and by area. The available financial data about support cost that is stratified by area therefore allowed the evaluation team working on the cost efficiency and draw conclusions on cost benefit by district. In addition, the timeliness of providing the data by GBS was a challenge.
- Changing in the political situation: General elections. This contributed to the delay.
- While doing the literature review, the research team had limited access to the service delivery related data which impede rationalization of status of implementation with services being rendered to intended beneficiaries.
- Inability to cover all geographical areas with defined number of data points as the timeline and resources abet omission of few stakeholders.
- Due to limited penetration of media defined the communication strategy, the study did not include the effectiveness of media plans being implemented.

4.12 Evaluation Matrix

The matrix in **Appendix A** provides information about the evaluation questions and sub-questions, data sources, data collection methods associated with each question, indicators/ standard or measure by which each question was evaluated, and methods for data collection.

This matrix formed the basis for the narrative of findings, conclusions and recommendations in the evaluation report.

4.13 Team Members and Their Responsibilities

The evaluation team was composed of 1 main expert, in addition to research assistants and data collectors. In addition, a support expert member for the Strategy efficiency was later summoned to conduct further cost benefit analysis.

RESULTS FINDINGS AND PRELIMINARIES OBSERVATIONS

This chapter presents the results, findings, and conclusions derived from data collection using the study methodology described above.

In the first section of this chapter, the case – defined as the Infant and Young Child Feeding Communication Strategy implemented by MoH and supported by UNICEF – is examined and evaluated based on the different OECD. In the second section of this chapter, the case will be examined against the theory of change that was developed at the initiation of this evaluation within and across the districts. The entirety of this chapter will serve as a basis for the conclusions and recommendations.

5.1 General information

The MCH service in all five Districts are being rendered by number of BFHI Centres and Clinics; maternity wards are the part of those facilities which are providing secondary and tertiary level care. The District wise number of facilities are mentioned in the table given below:

Table-6: District wise number of facilities

Type of Facility	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total
BFHI	74	-	-	-	13	87
Clinic	164	288	98	26	144	720
No. of Maternity Wards	68	120	46	24	14	272

The services related to IYCF+ are being provided by trained and qualified nurses; they have been adequately trained on various components of IYCF+ including counselling of beneficiaries and other care givers; they are mostly providing support to mothers during their stay in labour room and maternity wards. There are just three nurses each in the facilities in Saramacca and Coronie where service delivery is acutely inadequate. However, including nurses who are attached with labour room, all nurses are entitled to get trained on IYCF+, Districts have huge variation I number of nurses trained on IYCF+. It is presumed that all core staff of a facility to know about constitution of various bodies/ task forces including National Infant Feeding Task Force, for effective implementation of various activities related to the IYCF communication; most of the facility in-charge doesn't have knowledge about the said task force.

Table-7: Number of nurses and health workers formally trained in IYCF+

Items	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total
No. Nurses/Health Workers are attached to Labor-Room	50	32	3	3	22	110
No. of nurses/health worker formally trained in IYCF+ (including those attached to LR)	79	41	9	2	17	148

About 60-70% of Health Workers have been trained on IYCF+ and now focus is being given to augment the counselling capacity of both government and private service providers. Suriname score about 90% on institutional delivery; however, only 10% of delivery services are being rendered by RGD Clinics.

5.2 Results and findings based on OECD criteria

In order to assess the relevance, effectiveness, efficiency, likelihood of impact and sustainability of the IYCF Communication Strategy, data from Focus Group Discussions with beneficiaries and heath care providers, Key Informant interviews, document review, KAP survey and economic analysis were analysed. These are triangulated and analysed by district.

Appendix xxx includes a selection of quotes from key informants and focus group discussions.

5.2.1 Relevance

Evaluation Question: To what extent were the implementing communication strategies appropriate for achieving results considering the behavioral problems identified in the formative research (bottlenecks related to knowledge, attitudes, practices, social norms, gender norms, cultural norms, enabling environment or other factors)?

- To what extent was the IYCF communication strategy relevant in engaging all levels of a socio ecological model with regard to young child feeding practices addressing individual, community and institutional and policy actors?

- To what extent is the IYCF communication strategy relevant to the specific capacity gaps of health workers, policies and programs with regard to promotion of exclusive breastfeeding and other enabling factors related to IYCF?

The evaluation shows that the IYCF Communication Strategy is relevant in the context of Suriname. It introduced innovations in order to operationalize the social norms involving Husbands, older women, health workers and TBAs as main influence on mothers regarding IYCF practices. At present, the communication work is done mainly through group communication and one-on-one counselling. Traditional leaders and community leaders are also being used to convince husbands and older women, but they also have to be educated / informed first, and it is not clear whether they see IYCF as essential for saving children's lives.

Most of the facility in-charge (76%) have responded that it is good to initiate the BF with an hour of delivery of the baby; however, staff of Wanica facility has more in-depth knowledge on early initiation of BF.

Table-8: Initiation of BF after the birth

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Within 24 hrs.	3	4	-	-	-	7	19%
Within 1 hour	7	9	3	2	7	28	76%
After 24 hours	1	-	-	-	-	1	3%
Don't Know	1	-	-	-	-	1	3%

Therefore, in order to strengthen the communication at community level, there is a need for religious leaders to know and better understand the issue at stake, and to become advocates of EBF on a larger scale and at a higher level.

At community level, there is a need for a shift from education and information communication to empowerment and ownership of this issue in order to save their children and proudly show how beautiful and healthy they have become.

Media and New Information Technology Communication (NITC) must be used more systematically to showcase beautiful and healthy-looking, exclusively breastfed babies as well as testimonies of women, husbands, and leaders who tell their stories about having managed to overcome all resistance in order to implement IYCF practices for themselves.

Table-9: Number of informants who had access to Media and Media and New Information Technology Communication (NITC) in support to the IYCF+

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total
Facilities approached for promotion of milk-substitute	4	7	0	0	3	14
Access to the IYCF+ DVD series	4	5	1	0	1	11
Awareness about Radio or TV talk shows featuring IYCF+.	3	4	2	0	4	13
Awareness on promotional materials on IYCF+ such as TV/Radio spots, Poster, Newspaper etc.	6	13	3	2	4	28
Challenges faced to make hospitals baby friendly	12	13	3	2	7	37

In order to engage community participants in a dialogue about IYCF, a community-based approach to communication have to be strengthened. This will enable the community leaders and community-based organizations to examine the nutritional status of their communities, followed by IYCF practices in their communities and then see how they could improve these practices by drawing up a communication action plan. To moderate this process, partner NGOs and community-based organizations should be trained on the community-based approach at the meso level. This will make the IYCF Communication strategy more relevant and provide an analysis of the practices, attitudes, beliefs and social norms of micro-level participants.

The IYCF strategy is broadly aligned with national priorities that cover a wide spectrum of services under primary and secondary health. Although stated as a priority by the MoH, the evaluation team could not draw clear conclusions on their readiness to exercise ownership and take the leadership in implementation. The strategy can be further tailored to parallel the emphasis placed by the Government on quality of care and institutionalization of activities.

At the same time, the strategy responds to the Government of Suriname Health Action Plan and is considered a high priority by UNICEF with emphasis on improved sustainability and efficiency.

The Programme is also based on international IYCF guidelines and comprehensive in nature and has been adequately contextualized in terms of language and culture to the Surinamese setting.

The Programme responds to knowledge and practice gaps. There is a clear indication that the Programme is well accepted by and appropriate to PLWs. Therefore, it is regarded as well received through its adopted mode of operation, approach and design. The design is similar to a number of other international initiatives.

The strategy targets the most vulnerable groups living in the interior while there is no evidence to show that the demographic profile of those targeted groups represent the most vulnerable. In its current mode, gender issues are not explicitly addressed, i.e. the role of men and fathers in supporting adequate IYCF. There was an indication that men were welcomed during the sessions in case they were present, and this was validated in the attendance sheets. Yet this practice started recently.

There was no baseline established nor clear expansion plan as the time progressed and context evolved. Instead of scaling-up based on needs assessments and clear expansion plan, decisions to modify service package and expand the Programme came often from UNICEF and based on consultations with the partner organisation, it was implemented.

5.2.2 Effectiveness

To what extent have planned results in the implementation plan of the IYCF+ communication strategy been achieved?

- What are the major factors influencing the achievement and non-achievement of the results?
- To what extent is the IYCF+ communication strategy supporting the establishment of effective mechanisms that enable the concerns and voices of communities, including those marginalized, to be reflected in the decision-making at local and policy levels?
- To what extent have efforts contributed to strengthening of government professionals to conduct Social and Behavior Change Communication (SBCC)/ communication for development interventions?
- To what extent is the IYCF+ communication strategy helping to inform, influence, and support households, mothers and community groups for the adoption of new knowledge, attitudes and practices related to increased service seeking and other behaviour as planned?
- To what extent have efforts contributed to strengthening of government professionals to conduct Social and Behavior Change Communication (SBCC)/ communication for development interventions?

- To what extent is the IYCF+ communication strategy helping to inform, influence, and support households, mothers and community groups for the adoption of new knowledge, attitudes and practices related to increased service seeking and other behaviour as planned?
- To which degree have the management and coordination structure and mechanisms among program staff and partners been successful in achieving the results of the strategy?
- What has worked well and what needs to be strengthened, particularly considering the types of communication channels, spaces, voices and messages applied?
- To what extent is the fund allocation adequate to implement the strategic interventions?
- To what extent is the strategy designed and implemented in a way to generate solid evidence from monitoring and evaluation to monitor progress against results and to inform adjustments where required?
- To what extent are existing partnerships contributing or strengthened to achieve results?

Outcomes for the communication strategy included 5 behaviour change targets and 3 policy advocacy targets, which were defined in consultation with partners and are based on current practices and the estimated potential for change. Deadlines for the behavioural targets were set according to the cycle for implementing the Multiple Cluster Indicator Survey (MICS) that was most conducted in 2010 and is scheduled for 2018.

Overall outcomes for the communication strategy were defined according to the 2020 goal while interim targets were set for 2015. Achievement of 2015 targets depended upon rapid start-up and implementation of the communication strategy. While behaviour and social change usually takes several years, there was potential for “quick wins” on some issues that had simple messaging if there is a concerted focus on promotion through health facilities and mass media.

To access the effectiveness of the IYCF Communication strategy, data collection included multiple sources of evidence including: (1) records and documents reviewed through a desk review; (2) semi-structured interviews with key informants; (3) focus groups discussions with service providers (Doctors and nurses); (4) focus group discussions with mothers-fathers-caregivers benefiting from the IYCF strategy at different stages; and (5) questionnaire targeting beneficiaries of IYCF capacity building activities.

Evaluation of Progress toward IYCF-Communication Strategy Outcomes

IYCF-Communication strategy Outcome 1: Early initiation: By end 2020, at least 80% of women begin breastfeeding within one hour of delivery. (*Interim target: 55% by end-2015)*

Based on the data collected, about 76 percent (increasing from 45 percent) breastfeed within one hour of birth and 19 percent (decreasing from 64 percent) within the first day. Improvement in early initiation should be possible because it is highly influenced by practices of health workers and polices in health facilities. The majority of mothers interviewed during the focus groups knew that breastfeeding should begin within one hour and yet less than one third did so. Several mothers said that delays had been caused because "the nurse was too busy." Achievement of the interim target were 55% depends upon hospital policy and commitment. The gains seem higher and come more rapidly because several hospitals/ clinics are determined to improve early initiation rates. Progressive promotion and implementation of the Baby Friendly Hospitals Initiative helped health facilities to rise to a uniform set of standards in infant care.

Table-10: Number of mothers of babies <6 months who initiate the BF after the birth

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Within 24 hrs.	3	4	-	-	-	7	19%
Within 1 hour	7	9	3	2	7	28	76%
After 24 hours	1	-	-	-	-	1	3%
Don't Know	1	-	-	-	-	1	3%

Mothers stay at facilities provide opportunity for service providers to counsel her on various aspects of infant and childcare including BF, EBF, complementary feeding, immunization etc. Most of the facility in-charge responded that mothers are getting discharge from the facility within 24 hours; in some instances, as early as within 4 hours which put major challenge to implement IYCF+ activities at facility level.

Table-11: Mother getting discharged after delivery

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Within 4 hours	4	6	1	1	1	13	22%
4 to 24 hours	6	7	5		4	22	38%
24 to 48 hours	3	4	1		1	9	16%
After 48 hours	1		1			2	3%
Don't Know	3	3			6	12	21%

About 95% nursing staff do understand that BF has to be initiated within one hour of delivery; however, there are nurses who are not adequately trained on IYFC+ interventions have limited knowledge about early initiation of BF.

Table-12: Understanding on early initiation of BF by nursing staff

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Within 1 hours	16	19	8	1	11	55	95%
Within 24 hours	-	-	-	-	-	-	0%
After 24 hours	-	-	-	-	-	-	0%
Don't Know	4	4	-	-	4	12	21%

Though we could get limited data on understanding of nurses on what first liquid/ food a newborn should receive. About 97% nurses are well versed with the fact that mothers breast milk should be first liquid ought to be given to the newborn.

Table-13: Nurses knowledge about the first food or liquid required for newborn baby

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Only mother's milk/breast milk	17	19	8	1	11	56	97%
Breastmilk that comes after colostrum	0	0	5	0	1	6	10%
Sugar or glucose water	0	2	0	0	0	2	3%
Gripe water	0	0	0	0	1	1	2%
Homemade syrup/fluids	0	0	1	0	0	1	2%
Others	3	1	0	0	0	4	7%

Nurses in all five districts are well informed about the benefits of colostrum; they have been trained on the importance of colostrum and do counselling to the mothers also. Some of them were not very sure about the scientific reason for putting newborns on colostrum.

Table-14: Nurses knowledge on benefits of colostrum

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Critical for the health of the newborn	12	15	7	1	12	47	81%
First vaccine for the baby & improves the	4	1	2	1	2	10	17%
Promote the growth and healing of skin, bones, muscles	7	2	2	0	5	16	28%
Reduce pain and inflammation	4	1	1	0	3	9	16%
Enhance mental alertness and overall sense of well-being	4	2	0	0	2	8	14%
Helps in reducing the incidence of jaundice	2	1	1	0	1	5	9%
Makes the baby strong and healthy	7	1	2	0	3	13	22%
Advised by ANM	4	1	2	1	2	10	17%
Informed during training that it is good for baby	4	1	2	1	2	10	17%
Other	2	3	1	0	0	6	10%
Refused	0	2	0	0	0	2	3%
DNK	2	1	0	0	0	3	5%

IYCF-Communication strategy Outcome 2 - Exclusive breastfeeding: By end 2020, at least 18% of babies aged 0-5 months will be exclusively breastfed. *(Interim target: 4% by end-2015)*

Before the IYCF-communication strategy only 2.8 percent of infants aged 0-5 months were exclusively breastfeeding. About 18 percent were predominantly breastfed, which means breastmilk is their primary nutrition source although they may also be given water or vitamin drops etc.

The nurses and other facility level service providers are not very clear about on the duration during which BF should be continued; about 62% believe that it should be continued for first 6 month only. However, 28% responded that breastfeeding should be continued for 2 years or more.

Table-15: Nurses and service providers knowledges on duration of BF

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Till 6 Months	6	17	5		8	36	62%
One year	5		1			6	10%
2 years and more	6	3	2	1	4	16	28%
Don't Know							0%

According to MICS 2018, the median duration (in months) of any breastfeeding is about 6.0 in urban and 13.2 in rural area. Exclusive breastfeeding median duration is 0.5 in urban and 0.4 in rural.

This IYCF-communication strategy outcome was not reached. The MICS-6 data show that about only 9.7% (in Urban) and 9.5% (in rural) children are exclusively breastfeed during the 6 first months.

Service providers are quite aware on the correct time of introduction of complementary feeding i.e. after six-month. For knowledge on BF, EBF, complementary feeding etc., training on IYCF+ components (62%) followed by knowledge from nursing school (21%) are the major source of knowledge.

Table-16: Service providers knowledge about the Introduction of complementary feeding

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Any time before 6 months	-	1	-	-	2	3	5%
After 6 months	17	19	8	1	10	55	95%
Don't Know	-	-	-	-	-	-	0%

Increasing the proportion of exclusively breastfed babies depends on convincing mothers who predominantly breastfeed that babies do not need water; change in these deeply rooted survival beliefs is likely to take several years of sustained multi-channel communication effort. It also includes persuading some of the 82 percent of mothers who give infant formula to their babies to give only breastmilk instead. This will be a challenge while cheap, subsidized infant formula is on sale in health facilities, while employment is seen as an obstacle to breastfeeding and while expressing breastmilk is an unfamiliar practice. An advantage is that more than 20 percent of women aged 20-35 years define their occupation as "family caregiver" which suggests that employment may not an obstacle to breastfeeding for these women. Exclusive breastfeeding choices are more likely to be influenced if promotion begins during pregnancy, especially through inter-personal communication with health workers.

Effective promotion of exclusive breastfeeding during pregnancy therefore depends in part on increasing the proportion of women who attend all essential ante-natal clinics.

Currently, about 64 percent (in Urban) and 80 percent (in interior)[5] of women in Suriname attend at least 4 ante-natal clinics, when risk factors may be identified and advice on maternal and newborn nutrition and care offered.

It is quite encouraging to see wide range of subjects being covered by nurses/ service providers while interacting with mothers and other caregivers within the family. All these subjects and themes have been imparted to them primarily during training of IYCF+.

Table-17: Mothers Source of knowledge on EBF

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%
Training on IYCF+	11	9	7	1	8	36	62%
Knowledge from Nursing school	3	5	-	-	4	12	21%
Books & magazines	3	1	-	-	-	4	7%
No knowledge	-	-	-	-	-	-	0%
Other source	-	5	1	-	-	6	10%

[5] MICS-6 Suriname 2018

IYCF-Communication strategy Outcome 3 - Continued breastfeeding: By 2020, at least 50% of children aged 20—23 months will still be breastfeeding. *(Interim target: 18% by end-2015)*

During the evaluation, 18 midwifes were interviewed and their knowledge and awareness were assessed primarily on BF. Almost all midwifes are aware that breast feeding has to be started within an hour after the delivery. However, they have differential knowledge about the during till which BF to be continued. Only 50 % of them responded that BF should be continued toll 2 years or more and 33% responded that BF to be done just for 6 months.

Table-18: Midwifes Duration for continued breastfeeding

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
One year	3		-	-	-	3	**17%**
6 Months	2	3	-	-	1	6	**33%**
2 years and more	6	-	1	1	1	9	**50%**

The discussion from the focus group shown that the key message that extending breastfeeding reduces the risk of ovarian or breast cancer in mothers is likely to have a powerful impact.

The importance of colostrum was also access. Only 26% of mothers were able to mention that this substance is playing an urge role for improving the immunity of newborns.

Table-19: mothers' knowledge on colostrum (n-191)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
It improves immunity of newborns	14	7	2	1	26	50	26%
It is good for growth of the baby	6	4	4	1	15	30	16%
It shouldn't be wasted and must be given to the baby	20	1	1	0	3	25	13%
Others……	45	42	7	2	2	98	51%

About 191 mothers were interviewed during the study; they were probed on various aspects of IYCF+ interventions to understand their knowledge and practices to ascertain the uptake and utilization. Those mothers had either delivered recently wasn't yet discharge and those who visited the facilities after getting discharged. 43% responded that BF should be started within 1 hour of delivery; however, mothers have differential knowledge level regarding colostrum. Apart from indicated benefits of colostrum, mother's knowledge level is hugely influenced by local customs and practices which doesn't have correlation of scientific facts.

Table- 20: Mothers knowledge on initiation of BF (n-191)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Not started yet	4	-	1	-	-	5	3%
Within 1 hour	33	19	7	2	22	83	43%
Within 24	27	14	4	2	10	57	30%
Not applicable	8	6	-	-	-	14	7%
Other _____	6	12	1	-	-	19	10%

The focus group discussion shows that there is strong potential for identifying breastfeeding role models among urban women who may inspire others to prolong breastfeeding for at least two years. The results from 2018 MICS-6 will require immediate promotion of continued breastfeeding through health facilities and mass media.

IYCF-Communication strategy Outcome 3 - Complementary feeding: By 2020 at least 90% of infants aged 6-23 months will receive the minimum number of meals. ***(Interim target: 70% by end-2015)***

About 264 mothers with children of 7 months to 2 years of age were interviewed to understand the knowledge, attitude and practices towards complementary feeding. Pulses (50%) are their preferred food supplement followed by infant formula (48%).

Table-21: Mothers reaction on supplements in addition to breast milk (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Minced potato	17	18	20	5	26	86	33%
Pulses	30	44	23	4	30	131	50%
Rice	17	22	12	4	26	81	31%
Infant formula	36	43	20	6	21	126	48%

About 40% mothers started supplementary feeding after 6 months and 18% mothers did it even before 6 months.

Table-22: Mothers response on the age of adding supplementary food (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
After 6 months	22	40	12	5	26	105	40%
Before 6 months	13	13	15	1	6	48	18%
After a year	4	1	1	-	-	6	2%

Mothers mostly rely on doctors' advice (27%) for starting supplementary feeding to the babies; however other sources at community level also play important role in deciding the time of introduction of supplementary feeding.

Table-23: Reason for starting supplementary food (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Advised by Doctors	9	27	14	4	17	71	27%
Advised by community workers	8	-	1	-	7	16	6%
Recommended by family members	2	1	3	2	4	12	5%
Others	20	26	10		4	60	23%

Babies are mostly fed 2-4 times with supplementary food in a day; however, 11% women feed the babies 6 times in a day.

Table-24: Frequency of supplementary feeding (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Twice a day	14	11	15	4	12	56	21%
4 times in a day	13	24	8	1	11	57	22%
6 times in a day	4	18	1		6	29	11%
When baby cry	-	-	1	-	1	2	1%
Others	8	1	3	1	2	15	6%

Vegetables and fruits are the preferred additional supplementary food items being given to the children.

Table-25: Additional food items in practice (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Beans	22	3	4	1	20	50	19%
Meat	21	18	19	6	18	82	31%
Fish	28	28	20	6	21	103	39%
Legumes	21	31	18	5	17	92	35%
Fruits	35	35	24	5	31	130	49%
Vegetables	38	38	26	6	30	138	52%
Others	12	19	2	0	0	33	13%

Hospital staff are the still key source of information on supplementary feeding; substantial proportion of mothers rely on community volunteers (12%) and internet (11%).

Table-26: Source of information of supplementary feeding (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Community level volunteers	12	11	2	0	6	31	12%
Social Media	0	2	0	0	0	2	1%
Clinical staff at facility	21	43	19	4	24	111	42%
News paper	0	0	0	0	1	1	0%
TV	5	5	4	3	6	23	9%
Internet	4	5	11	1	9	30	11%
Display materials	0	2	1	0	11	14	5%
Print materials like pamphlets	4	4	0	0	5	13	5%
Others	17	17	8	1	4	47	18%

Baby care booklets (42%) is widely available print material on childcare/ child feeding practices; leaflets (16%) and posters (17%) are also available for the use of mothers.

Table-27: Print materials available on childcare/ child feeding (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Baby care book	23	29	21	6	31	110	42%
Pamphlets	0	1	2	0	6	9	3%
Leaflets	14	11	5	1	11	42	16%
Posters	11	17	8	0	8	44	17%
Calendars	1	0	0	0	1	2	1%
Others	17	18	4	0	0	39	15%

The available IEC activities have played excellent role in influencing mothers KAP towards baby's nutrition; they are now well versed with nutritional requirement of the baby (44%) and practices hand hygiene while feeding their babies (12%).

Table-28: Perceived change in practice due to IEC (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Improved sensitivity for baby's nutrition	23	47	20	2	25	117	44%
Practices handwashing for feeding the baby	14	3	7	1	7	32	12%
Others	2	4	1	3		10	4%

Traditional healers are not reliable when it comes to feeding practices; mothers don't refer them as having any influence at community level practices.

According to MICS-6, 28.8 percent of children aged 6 to 23 months are currently breastfeeding and receiving solid, semi-solid or soft foods (26.0 percent in Urban, 36.4 percent in interior). Worst affected were children living in Commewijne, in the rural interior, where it appeared that over 75 per cent of children in this age group were not being fed with sufficient frequency.

Increasing the proportion of children receiving sufficient meals from 28% to at least 70% depends on systematic participatory nutrition education of mothers and key family members led by health workers and supported through other media channels. With concerted promotion through mass media and health facilities this could be a quick win with interim targets achieved/surpassed by 2020.

However, measuring the number of meals, while a good proxy for assessing energy intake, is inadequate as a measure of nutritional intake. Messaging on this complementary needs to reflect both the quantity and quality of foods young children should receive.

IYCF-Communication strategy Outcome 4 - Recognizing and responding to pneumonia: **By 2020, at least 80% of caregivers can identify two danger signs of pneumonia.** ***(Interim target: 50% by end-2015)***

The 2015 interim goal of 50% requires a dramatic increase in recognition of these danger signs. This 'quick win' is feasible because the message is simple and the interest from parents and other caregivers will be high.

The IYCF evaluation have shown a limitation in the survey approach of measuring pneumonia because many of the cases reported in surveys by the mothers or caretakers with symptoms of pneumonia are in fact, not true pneumonia[6].While this limitation does not affect the level and patterns of care-seeking for symptoms of ARI, it limits the validity of the level of treatment of ARI with antibiotics, as reported through household surveys. The treatment indicator described in this report must therefore be taken with caution

MICS-6 presents 58.7 percent of children with symptoms of ARI, which is also generally referred to as symptoms of pneumonia. About 89.1 percent of cases were identified by the care givers. In other hand 31.6 percent received antibiotics for which 97.5 percent were provided by health care providers.

Achieving these targets were possible through its inclusion in systematic briefings of mothers on discharge from hospital after giving birth, as well as inter-personal promotion through health facilities, incorporation in health facility communication materials and promotion through mass media in compelling and creative ways.

IYCF-Communication strategy Outcome 5 - Treating diarrhoea: **By 2020, at least 90 percent children with diarrhoea will be given ORS or approved home treatments.** ***(Interim target: 82% by 2015)***

Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salt solution (ORS) or a recommended homemade fluid (RHF) – can prevent many of these deaths.6

[6] Campbell, H. et al. "Measuring Coverage in MNCH: Challenges in Monitoring the Proportion of Young Children with Pneumonia Who Receive Antibiotic Treatment." *PLoS Med* 10, no.5 (2013). doi:10.1371/journal.pmed.1001421

In addition, provision of zinc supplements has been shown to reduce the duration and severity of the illness as well as the risk of future episodes within the next two or three months[7].

The MICS-6 2018 shows that the percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration salt solution (ORS), represent 45.6 percent (46 percent in urban) and 45 percent in rural). This targeted outcome was not reached.

The focus group discussion revelated that diarrhoea is understood to be more common in the interior where water quality is poorer yet according to MICS 2018, a third of interior children with diarrhoea were given less to drink. To reinforce the IYCF intervention could be a relatively quick win with interim targets achieved/surpassed by end of 2020 if it is the focus of inter-personal communication with health workers, incorporation in health facility communication materials and promotion through mass media in compelling and creative ways. Communication products for the interior need to be in local languages.

It is quite encouraging to see wide range of subjects being covered by nurses/ service providers while interacting with mothers and other caregivers within the family. All these subjects and themes have been imparted to them primarily during training of IYCF+.

However, only 28% service providers are aware about the National Code on Marketing of Breast Milk substitutes under which sale of commercial product/promotional material can be prohibited.

Table-29: Topics covered by nurses/ service providers while interacting mothers and caregivers

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%
Breastfeeding	8	10	8	1	6	33	57%
Exclusive breast-feeding	15	12	7	1	10	45	78%
Diarrhea	5	4	0	0	3	12	21%
Fever	5	4	0	0	3	12	21%
Convulsion	3	2	0	0	3	8	14%
Referral	2	2	0	0	3	7	12%
Growth monitoring	9	13	3	0	5	30	52%

[7] In 2004, UNICEF and WHO published a joint statement with diarrhoea treatment recommendations for low-income countries, which promotes low-osmolarity rehydration salts (ORS) and zinc, in addition to continued feeding: WHO, and UNICEF. *Clinical Management of Acute Diarrhoea.* Joint Statement, New York: UNICEF, 2004.

Age appropriate vaccination	15	11	7	1	10	44	76%
Others	15	11	7	1	10	44	76%
DKN	0	0	0	0	0	0	0%

IYCF-Communication strategy Outcome 6 - Policy advocacy: By end 2015, government will end the sale of infant formula from health facilities and by August 2016 a national code on the marketing of breastmilk substitutes will be developed. By 2017 the subsidy for infant formula will be phased out.

Developing a national code on the marketing of breastmilk substitutes was identified as vital for policy revision and sustaining results.

To complement advocacy efforts to strengthen national legislation and enforcement of the International Code of Marketing of Breast-milk Substitutes and its subsequent, relevant resolutions (together referred to as “the Code”), UNICEF, WHO and the Ministry of Health along with others has formally signed on to a Call to Action (CTA) to mobilize action from all breast-milk substitute (BMS).

The goals of the communications approach are to encourage BMS companies to respond with strong commitments, proactively mitigate potential negative responses, and prepare to diffuse any negative attention the CTA may receive. While the leadership of BMS companies will be contacted directly and materials be sent to relevant industry associations, communications around the CTA will be largely reactive.

The evaluation shows that the draft code was developed by the BOG, in collaboration with UNICEF and WHO-PAHO. The Ministry of health is leading the submission process to the parliament for discussion and passing the legislation.

Achievement of results may be hampered however by political campaigns and depends on ensuring widespread understanding of the issues involved among politicians and mass media as well as large scale commitment from health professionals.

IYCF-Communication strategy Outcome 7 - Policy advocacy: By end-2016, national maternity leave legislation is in development and/or implemented.

Suriname is one of very few countries in the world to lack national maternity leave legislation.

About 41 percent of women aged 20-35 years are working but only government employees have maternity rights guaranteed by law. In the private sector, maternity leave is determined by individual employers.

The evaluation shows that the paternity leave is now included in the maternity leave and thus legalized in Suriname from January 12, 2019[8]. The Introducing of paternity leave legislation will help more mothers to breastfeed, especially because this incorporates recommendations of the International Labour Organization (ILO) which advocate for a shorter working day or extra breaks for breastfeeding or expressing breastmilk for mothers of infants under 6 months.

Progress depends on effective leadership and collective action engaging stakeholders across the health spectrum, employers' associations, women's organizations, workers associations, politicians, and the mass media.

Mothers Legislation contemplating entitlements of mothers has been recently approved by the Government; though implementation machinery is not in place. According to the new legislation, apart from 4 months of maternity leave fathers are also entitled for 5 days of paternity leave.

The Programme was able to implement almost all planned activities yet fell short to achieve in full and to the desired extent all of its outcomes. Results were more evident at the level of increasing awareness of the target groups and provision of services to the PLWs. Achievements were less obvious in terms of increased knowledge and capacity of service providers and inducing a major change in the policy framework and social norms. Gaps were also identified in the reporting of some indicators and the matching of indicators to actual activities. The integration of additional activities within the IYCF+ proved to be useful, and it was apparent that providing a comprehensive package is of added value to beneficiaries.

Evidence shows that UNICEF provided sufficient technical assistance and support to programme staff. The programme staff has accumulated technical capacity through extensive and continuous training, as well as on communication skills.

A number of strengths were identified, namely:

(1) Outreach efforts and the presence of local community mobilizers who are mothers;

[8] http://m.starnieuws.com/index.php/welcome/index/nieuwsitem/50736

(2) Engaging men, though it started much later in the programme phase, was seen as a positive approach to facilitating the necessary behaviour change among mothers, especially when men play the role of enablers;
(3) The service provision contributed to the perceived value of the IYCF strategy;
(4) The one-on-one counselling and follow up provided to mothers which was seen as most effective in changing behavior (in Apoera) ; and
(5) The contribution to enforcing the Code and the inadequate support given to artificial feeding.

5.2.3 Efficiency

How cost effective is the current approach to manage and implement the IYCF+ communication strategy? Including the consideration of the communication channels that are the most effective in changing behaviours, in the most cost-effective manner

- How can the cost/benefit in the implementation be maximized?
- Has the implementation and monitoring of the IYCF+ communication strategy been implemented in a standardized way as per plan? If so, to what extent?
- What are the enabling factors for and or bottlenecks?

Evidence shows that the Programme was relatively cost-efficient as compared to similar programmes in other countries. Based on the partial financial data available, the unit costs for counselling are on the lower side of counselling costs referred to in the available literature and tend to corroborate the cost-efficiency of the intervention. The financial management of the communication strategy lacks some clarity and proper documentation of disbursements as per budget line items and activities. This could have strengthened the cost analysis.

Table-30: IYCF Communication Strategy Cost Benefits Analysis

Variable	Paramaribo	Nickerie	Saramaca	Total
Data				
Direct programme beneficiaries' Pregnant women expected = Population total *4%) (a)	**9,637**	**1,369**	**689**	**11,695**
IYCF programme cost for development of the intervention (b)	**$US 21,334**	**$US 14,613**	**$US 9,017**	**$US 44,964**
Discounted benefits of IYCF+ represent ($110)[9] (c) *DALY: Education Programme on Nutrition and WASH:* **Cost-effectiveness ratios for interventions for RMNCH in 2012 US Dollars per DALY averted**.	**$US 1,060,070**	**$US 150,590**	**$US 76,780**	**$US 1,287,440**
Programme cost per capita: Total Cost divided by number of direct beneficiaries (n<$US 10)	**$US 2.2**	**$US 10.6**	**$US 13**	**$US 3.8**
CBA-Calculation				
Net present value (NPV) = PV of benefits minus PV of costs. If NPV > 0, benefits outweigh costs. $c - b = NPV$	**$US 1,038,736**	**$US 135,977**	**$US 67,763**	**$US 1,242,476**
Benefit–cost ratio (BCR) = PV of benefits divided by PV of costs. If BCR > 1, benefits outweigh costs. BCR= $\frac{c\ (PVB)}{b\ (PVC)}$	**49.6**	**10.3**	**8.5**	**28.6**
Internal rate of return (IRR) = discount rate at which NPV is equal to zero. The higher the IRR, the higher is the return on the outlay of expenditure and therefore the better the investment	**1st**	**2nd**	**3rd**	

Opportunities exist for institutionalization of activities within the services of the MoH. Nevertheless, it was noted that the Communication Strategy is being implemented separately from existing services despite the claimed efforts for integration.

[9] DALY: Frequently used indicators are the cost per life saved and the cost per disability-adjusted life year (DALY)

The evaluation team noted that IYCF+ could be considered as a cost-effective intervention that contributed to increasing access to services with minor cost modifications.

The evaluation found that there is added value to engage volunteers, however, it is premature to draw on the extent to which their contributions affected efficiency.

The Programme has had delays in implementation, thus the implementation rate did not match the plans. This was partly due to waiting time for approvals from the Government, which required several extensions and amendments. Still, the strategy was able to function within planned budgets.

5.2.4 Sustainability

To what extent are the IYCF+ communication strategy implementation and management arrangements and funding sustainable?

- To which degree do implementing partners, including management and coordination of the strategy, have sufficient capacity, interest and resources to continue the communication strategy?
- What recommendations and lessons learnt should be considered for the future?
- To which degree do health workers have sustained capacity and interest in delivering the behavior change messages and counselling how have they been addressed?
- To which degree are families who have benefitted from the C4D strategy maintaining their interest and motivation for adopting the recommended behaviour?

Although sustainability was taken into consideration in the design of the communication strategy, there is no evidence of a clear and gradual exit plan in the targeted districts. As the strategy moved forward, some efforts to build partners' capacity were made, but these fell short of what is needed to ensure sustainable quality services.

The MoH and other partners indicated their willingness to integrate IYCF-communication strategy, yet the preparedness level varied across structures. Some level of knowledge related to IYCF has been transferred to MoH health care providers. At the same time, the evaluation indicates that trained staff would not be able to provide adequate and quality advice to mothers at this point in time. Other barriers included: the lack of current prioritization of IYCF indicating inappropriate timing for phasing out the UNICEF supported programme implemented by MoH; limited technical capacity on the part of the MoH; lack of funding; and the power of businesses marketing infant formula. For integration of the Strategy within MoH systems, a capacity assessment will be required to review the MoH's current structure, related systems and resources.

In targeted districts settings, the IYCF-Strategy is being implemented in coordination with other partners, and services are being provided separately from other health activities. Efforts have been made to incorporate newborn care including vaccination and hygiene promotion within the services provided by the strategy, which proved to be useful. In districts, the communication strategy can be also integrated into existing early childhood development activities. Community members can be more effectively engaged to enhance the sustainability of the strategy.

Traditional healers are not reliable when it comes to feeding practices; mothers don't refer them as having any influence at community level practices.

Table-31: Reason to access traditional healer (n-264)

Responses	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Good reputation in my local area	-	-	-	-	7	7	3%
Head of the HH suggested	-	1	-	-	1	2	1%
Available near to my house	3	-	-	-	-	3	1%
Others	1	4	2			7	3%

The IYCF-communication strategy states that practices need to become the norm at community level if they are to be implemented by individuals and families. This means that there should be social mobilization regarding this issue at community level to make sure that every single newborn and baby under two years old gets the right food.

To make the IYCF communication strategy more sustainable, the interviewed persons in the focus groups mentioned that:

- Social networks in the community should mobilize themselves to achieve this goal. In the same way that some of them have organized themselves to transport pregnant women to deliver in hospitals, they should also organize themselves to make sure that every mother implements the correct IYCF practices.
- In this regard, and as part of the implementation of the IYCF action plan, women's groups, faith-based organizations, school clubs, and all other interested social organizations in the community should be able to organize communication activities regarding IYCF. These could be group discussions, theatre presentations by schools or local theatre groups, shows during local festivals or religious gatherings. Mothers or entire families could attend and be congratulated for having participated.

A network of men and women could volunteer to undertake systematic home visits to households where newborns and children under two live to assist them with the practice. This IYCF support network should consist of traditional birth attendants, elderly women and men and model fathers and mothers who have practiced IYCF successfully and who can testify during home visits or during group discussions. Community volunteers could also continue with home visits, but they would not be alone and would work together with other volunteers. This would increase the number of home visits and a greater number of people would be reached.

- The IYCF support network at the community level would also help to find solutions if any resistance is encountered. Men could talk to men, or elderly women could talk to unconvinced mother-in-law or ask the religious or traditional leader to help talk to her. This would be important for everybody in the village.
- The IYCF support network would also focus on vulnerable groups, especially pregnant teenagers and mothers.
- These activities would complement activities that are already taking place during the MNCH weeks, World Breastfeeding Week, Safe Motherhood Day and Immunization plus Days. These occasions would be occurrences for the communities and the social networks to show what they have done and celebrate their achievements. These activities usually attract a lot of attention to the network, but their daily work would be required to maintain the momentum for achieving long-term results.

5.2.5 Gender Equity

To what extent Communication strategy comply with the gender equity

To what extent Communication strategy comply with the gender equity?

A perceived change was noted in knowledge, capacity, and practices among service providers and end-users such as pregnant and lactating women. Other perceived changes related to positive changes in social interaction and cost savings by practicing breastfeeding. Most changes were attributed to the counselling, follow-up and education activities that were implemented by the Programme.

Health workers and elderly women within the family are most convenient support available at community level for providing assistance/ advise/ support on breastfeeding; about 35% responded positively on assistance provided by Health workers at community level and 26% are banking on the support received from the elderly women within the family.

Table-32: Support available at community level (n-191)

Category	Paramaribo	Wanica	Saramacca	Coronie	Nickerie	Grand Total	%age
Health Worker	22	20	4	3	17	66	35%
Mother- in- law	3	7	1	1	7	19	10%
Grand mother	5	4	3		1	13	7%
Don't Know	16	5	1		2	24	13%
Husband	1	-	-	-	5	6	3%
Other elderly women from the family	30	15	4	-	-	49	26%
NGO reps	1	-	-	-	-	1	1%

The strategy might have contributed to some policy changes, including the endorsement by parliament of the code for marketing breast milk substitutes.

The assessment of the strategy against the theory of change also indicates potential of the strategy contributing towards impact. With this said, the IYCF strategy's contribution towards improved nutrition status of children cannot be confirmed until quantitative data is analysed[10]. It should also be noted that achievement at impact level will be dependent upon the Government's willingness to take ownership and responsibilities around the IYCF Programme.

The interviewed persons in the focus group suggested following aspects for strengthening gender equity in IYCF-Communication strategy in programming:

The husbands, grandmothers/mothers-in-law, other family members and peers should actually help mothers to implement the IYCF practices. They should also be the focus of educational sessions. They will be shown evidence and testimonies by their peers, and they will be shown how to support mothers to implement the practices.

[10] The evaluation team is analyzing the data from the Interagency Nutrition Survey conducted in 2016.

They also need to support the women of reproductive ages, pregnant and lactating mothers to attend mother-to-mother support groups' food cooking demonstrations, tend a home garden or participate in a community garden, or to let the TBA or the CV come to their homes to show them the 10 steps for better breastfeeding.

Husbands need to bring nutritious food home for the family especially children under the age of two and they need to make sure that children are fed from different plate with adequate food appropriate for their age. They also need to ensure that the mothers make out time to rest so as to be able to breastfeed their babies (particularly in the case of twins or more) exclusively for the first six months and to continue breastfeeding them until they are two years old. Husbands need to allow their wives to have an income-generating activity that will help them take better care of their children.

Mothers, husbands, mothers-in-law and mothers of children and other caregivers of children under 2 years need to be able to recognize signs of sickness and malnutrition and handle them correctly.

6.LESSONS LEARNT

The evaluation drew main lessons learned that should be taken into consideration while implementing similar strategies and for the next steps of the implementation of the IYCF-Communication Strategy and future developments:

- A pre-test evaluation needs to be done before the implementation of the strategy. This will determine baseline to be incorporated at the initiation phase of the implementation of the programme and strategy. This is essential to measure the short term (outcomes) and impact of IYCF communication strategy.
- Due to the fact that the longitudinal tracking of change in breastfeeding rates have to be measure every 5 years when doing MICS-6, the establishment of a monitoring and tracking system as well as implementing representative longitudinal surveys will be helpful to assessing the impact and capturing the effects of the strategy during the implementation phase.
- Sufficient quantitative indicators need to be reported throughout the Nutrition Programme to ensure reporting and measuring impact of the Strategy. Although the Strategy did not have a baseline assessment, still, throughout the three years of implementation, there could have been some modifications in the indicators to include some form of evaluation of the communication strategy impact including rate of breastfeeding mothers or other IYCF indicators. Despite the availability of such data on paper through monitoring forms, they are not systematized in a manner that enables reporting on progress. Having a clear log frame that includes IYCF indicators and targets linked to the theory of change readily available would have facilitated the process of evaluating the impact of the Programme and therefore further highlighted its need.
- Stronger coordination mechanism and mentoring components needed to be incorporated from the beginning. It was apparent that from its beginning the strategy was designed as a long-term intervention which need a strong coordination mechanism.
- Stronger engagement of the MOH and the community-based organisation from the beginning is needed to ensure sustainability. As the Programme progressed to target most at risk communities/ districts, no attempt was made to provide a sustainability plan or at least documentation for the gaps needed to be filled to provide appropriate IYCF services through a sustainable approach. In addition to the capacity building, there should have been a stronger engagement of the community-based organisation from the beginning to be able to brainstorm about sustainability plans and measures.
- Better financial quality assurance was needed. The evaluation noted gaps in financial management from the part of the implementing partner (MoH). There is a need to improve financial quality, and to capture all investment on IYCF (directs and indirect costs) for improving the cost efficiency and cost-effective analysis.

- The changes in the management of the Ministry of Health, delayed the advocacy session for getting the legislations on code of breastmilk substitutes and the paternity leave in support to the IYCF.
- The BFHI contributed very significantly in the promotion of the Breastfeeding in the targeted community covered by the programme.

7.FINAL CONCLUSIONs

The IYCF Communication Strategy proved to be useful and needed, filling a gap in IYCF. At the same time, the IYCF Communication Strategy presents an opportunity to provide a fully integrated set of services that address the same target population and require a set of skills that are relevant to those provided by the IYCF Communication Strategy team. In order to improve on efficiency and effectiveness of the IYCF Communication Strategy, the evaluation team recommends that IYCF services continue to be provided in the district's settings, however, using a different integrated modality.

Building on existing literature, there is a strong link between early childhood development and early nutrition. This has been further emphasized and confirmed in the new recently published Lancet series, where the message that child health and childhood development services should be integrated is strongly emphasized. The series highlights the importance of multi-sectoral interventions starting with health, which can have wide reach to families and young children through health and nutrition[11]. The series also highlights 'nurturing care', especially of children below three years of age.

Based on the above and given the potential of the IYCF Communication Strategy to be integrated as such, the evaluation recommends that the IYCF Communication Strategy modality be modified to encompass in addition to IYCF, other early childhood development activities. The evaluation found that a number of the ECD messaging coincide with those provided through the IYCF-communication strategy. Furthermore, newborn care messaging and counselling, ANC and PNC, hygiene promotion and mental health are also valid to be incorporated within the IYCF Communication Strategy.

The evaluation recommends that the IYCF Communication Strategy be scaled up to an integrated IYCF Communication Strategy that includes all the above-mentioned activities. The IYCF Communication Strategy does not necessarily need to be named IYCF-P, however, consideration should be given to show that the IYCF Communication Strategy targets the first 1000 days in a child's life with essential services that would ensure a healthy start. This is to continue the advocacy of IYCF.

Findings show that the Communication strategy seem relevant, effective and efficient in the context of Suriname. But there is a need for strengthening the sustainability of the strategy. The role of community mobilizers was seen as essential and contributing to IYCF Communication Strategy outcomes. In order to contribute to the sustainability of the IYCF Communication Strategy, the evaluation recommends that the mother-to-mother component of the project, previously planned to be implemented, be acted upon.

[11] lancet series : http://www.thelancet.com/series/ECD2016 accessed on October 7, 2016

The “mother care group” model implemented by IMC or the “mother action group” model developed by UNICEF in other countries could serve as examples to follow. The mother-to-mother group will provide the opportunity for ‘lead’ mothers from the targeted community to provide regular support to other mothers PLWs as previously shown (Kushwaha et al., 2014)[12]. This could be particularly useful in interior, given the low number of beneficiaries.

Given the role that men have in a number of family health decisions and in view of the cultural sensitivities, it is recommended that the IYCF Communication Strategy looks into different modalities for targeting men. One way could be to hire male community mobilizers or staff who would be trained on health messaging.

To counteract the conflicting messages on IYCF between different service providers, the evaluation recommends that continuous dissemination of IYCF messages be conducted targeting different groups. Regular workshops and sensitization sessions could be implemented to raise awareness about IYCF guidance including protection, support and promotion. It is also important to look into existing opportunities of integrating IYCF messaging into other sector material such as mental health, ECD, food security and reproductive health.

Although data including output indicators and financial information has been shared through this evaluation, it is evident that there is a gap in data management, monitoring and financial management of IYCF- communication strategy. The gap analysis/barrier analysis or baseline assessment need to be incorporated in the IYCF-Strategy. Also, there is a need for inclusion of an organized tracking system for reporting and/or shared with MOH. The tracking would match IYCF Communication Strategy-identified indicators and serve as a monitoring tool. There is a need to adopt a unified results framework developed based on Theory of Change that would be used for regular reporting of indicators. In addition, further financial management capacity development is warranted to ensure consistent and accurate reporting. Third, there is a need to include an evidence base research approach that would guide and feed into the IYCF Communication Strategy evolution.

Integrate the IYCF- Communication Strategy into the developed National Health Strategy and support the implementation of the strategy or development of a revised one should be the best option for sustainability. This IYCF Communication Strategy evaluation can form the basis for moving a national strategy forward and would be complemented by other activities. Based on the findings of this evaluation, the recommendation bellow can be taken to move forward with the established strategy that supports IYCF at the National and districts levels.

[12] Kushwaha, K. P., Sankar, J., Sankar, M. J., Gupta, A., Dadhich, J. P., Gupta, Y. P., ... & Sharma, B. (2014). Effect of peer counselling by mother support groups on infant and young child feeding practices: the Lalitpur experience. *PloS one*, *9*(11), e109181.

8.RECOMMENDATIONS

Recommendations for policy environment on IYCF+:

To the MoH

- Integrate the IYCF-P into the developed National Health Strategy and support the implementation of the strategy or development of a revised one. This Programme can form the basis for moving a national strategy forward and would be complemented by other activities.
- Form a Technical Committee to strengthen IYCF practices through Primary Health Care services and ECD services and identify a champion who would influence the moving forward of the plan.
- Build the evidence about the need for IYCF in Suriname through documenting best practices and conducting regular assessments and IYCF reporting system.
- Evolve norms for standards of Baby Friendly Hospital Initiative and Community Initiative for certification from community level to health facility level and include these norms in the Health Standards.
- Develop an IYCF reporting system at the MOH level that is included in the health information system. This would serve as a surveillance tool and would also contribute to building the evidence about IYCF.
- Incorporate Baby Friendly Hospital Initiative (BFHI) within the National Plan with clear implementation and sustainability measures. It has been shown that implementing the BFHI is considered a key contributor to successful breastfeeding initiation and continuation, including in the region[13]. In addition to capacity building and monitoring, MOH might consider incorporating BFHI into its accreditation requirements for hospitals in order to ensure sustainability.
- Advocate formulation of action plans for implementation of community and facility level interventions on IYCF+ through a robust implementation and monitoring framework.

To the Health Care Service providers

- The components of IYCF+ counselling should be included as one of the “services” being provided by the community level health workers during their routine visits to the field;

[13] BFHI and Paternity Leave Legislation in Suriname.

- Develop an integration plan for IYCF activities within an integrated package of newborn, child health, ECD and nutrition services for 0-2 year olds
- Ensure adequate support for the working mothers by effective orientation on provisions of Maternity Benefits in the legislation, provisions of supportive childcare services and other entitlements;

To the IYCF partners and donors

- Allocate specific budget lines for IYCF+ communication strategy in the annual budget;
- Participate to the National Breastfeeding Committee to coordinate and review half-yearly actions for achieving goals for IYCF+ programmatic outcomes.
- Introduce key indicators on IYCF+ in the Monthly Progress Reports (MPRs) as well as regular monitoring and evaluation process at community and facility.
- BOG to enforce the practice of recommended duration of exclusive BF; the academic background of service providers should not overshadow the scientifically recommended practices.

Recommendations on improving demand

To the Health Communication Team (MoH)

- Develop a public awareness IYCF plan to raise awareness about IYCF. This would also serve as an advocacy tool to lobby for IYCF within communities.
- Integrate IYCF training material within the curriculums of health professionals including doctors, nurses, and midwives. The evaluation recommends that the curriculums of key health professionals include essential and sufficient IYCF material to build capacity of service providers at the pre-service level.
- Formulate and implement a comprehensive national IEC strategy on IYCF+ and devise and implement a national IEC campaign to improve IYCF+ using media-mix approach with the help of experts and media professionals

To local community-based organisations

- The home visits being done by health workers in the community to be utilized for sensitizing the community to come of the traditional practices and believes regarding BF, EBF and complementary feeding. Culturally sensitive communication plan to be devised taking heterogeneity of population in account.
- Community level influential leaders are to be involved to sensitize the communities especially on discouraging traditional practices regarding initiation of BF and better ownership of community towards community level programmatic interventions.
- Periodic need assessment of the community to be done by commissioning short terms studies on the demand and health seeking behaviour of the community;

- Use of milk substitute should be discouraged and importance of mother's milk for the betterment of baby need to be reiterated through print and electronic media.
- Encourage culturally and traditionally acceptable and appropriate quality foods and feeding behaviours, based on local formative research, and incorporate in the programme for improving IYCF practices.

Recommendations for improving supply side on IYCF+:

To MoH and IYCF partners

- All designated facilities need to be operationalized as per the credentials set in for Baby-Friendly Hospital. To ensure the compliance, an advisory committee need to be constituted at facility level to keep an eye on routine activities and the allied infrastructure and HR required to render the services on prescribe parameter;
- Establish political will and prioritization of IYCF within MOH through allocating more budget and enforce existing policy implementation (BMS code).
- A mechanism to set in for annual SWOT analysis of all facilities in the Districts to identify the gaps and challenges in providing service on IYCF+;
- A District level dedicated IYCF+ Cell need to be constituted with requisite HR and infrastructure; this can work as planning unit for the entire District; this cell could also be a technical support unit for other MCH services other than IYCF+.
- A robust monitoring mechanism to be set in wherein information generated at community and facility can be used for decision making;
- The capacity building strategy for service provider need some makeover, interactive sessions with simulation activities could be a new methodology to impart more scientific and accurate knowledge to be passed on to the beneficiaries.

ANNEXURES- Tools used during the study

A. Consent Form-

Title: Evaluation Infant and young child feeding and essential care in Suriname - Communication strategy

Sponsor: UNICEF, Suriname

Principal Investigator(s): ……

Introduction

We are asking you to take part in research study to understand about the Communication strategy under IYCF+ project by GOB. We want to be sure that you understand the purpose and your responsibilities in the research before you decide if you want to be in it. Please ask us to explain any words or information that you may not understand.

Information About the Research

We are currently talking to women (and other caregivers within the family) who currently have a child 0-23 months of age to understand behavior and practices they adopt for breastfeeding, complementary feeding, vaccination, and care of children 0-23 months. We, therefore, request you to participate in this survey which will help us understand the existing knowledge of women like yours so that appropriate and correct knowledge can be imparted to such women to change their behaviours and practices for good.

This interview will take about 30 minutes time.

Possible Risks

There are minimum risks if you participate in this research as there would be some questions which may cause you discomfort. In such situation, participation is voluntary, and you may choose not to answer any such interviewer's questions. We will only gather information from you that will be used for research purposes.

Possible Benefits

There are no direct benefits to you for participating in this research. However, your participation will help us better understand the current behaviours and practices around care of young children and this knowledge will be used for improving program outcomes and interventions that will help the larger community.

If You Decide Not to Be in the Research

You are free to decide if you want to be in this research or not. If you decide not to participate, your decision will not be counterproductive to you in any way.

Confidentiality

We will protect information about you and your taking part in this research to the best of our ability. We will not use your name in any reports. We will not tell your anyone in your family about your participation.

It is possible that I or someone else may come a bit later to seek some clarification as part of data back check and spot check on information you provide in this interview. In case we come again, we will not identify you as someone who has participated in this research before.

All information that you provide (including your name and other family details) will be kept confidential to the best of our ability. Any information that can identify you as a participant of this research will only be shared with those working on this study.

Payment

You will NOT receive any payment as a compensation for your time and effort you devote for this interview. We request your voluntary participation in the larger interest of the study.

Leaving the Research

You can also choose to not answer any of the questions that I will ask you. Also, you may end your participation at any time. This will not have any adverse implications on you or your family.

If You Have a Questions About the Study

If you have any questions about the research, you can call (Give the contact details) on any of the working days between Monday and Friday.

VOLUNTEER AGREEMENT

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Signature of Person Who Obtained Consent Date

B. CHECK LISTS/QUESTIONNAIRE FOR FACILITY BASED EVALUATION

Section A- Hospital/RGD Poly Clinic Information **District: -**

S.No	General Information	
1	Hospital/RGD Clinic	
3	Type of Facility	BFHI / Clinic/ Other
4	Date of Visit	
5	Name of the Head of the Hospital/Duty Bearer/In charge of the Facility	Name: Contact No:
6	Is Maternity Ward available in the facility?	☐ Yes ☐ No

Section B- Head of the Hospital/In charge of the Facility Interview

S.No.	Questions	Responses	Remark
1	How many Nurses/Health Workers are attached to Labor- Room [Hoeveel verpleegkundigen/gezondheidswerkers zijn verbonden aan de verloskamer?] Note: Leave it blank for RGD clinic as there are no Labor room in RGD clinics [Noot: Laat het open voor de RGD -klinieken daar er geen verloskamers zijn in RGD -klinieken]		To be asked from Duty Bearer/Head
2	Of the total nurses/health worker attached to labor Room, number of nurses/health worker formally trained in IYCF+ (for hospital) [Van het totaal aantal verpleegkundigen/gezondheidswerkers		To be asked from Duty Bearer/Head

	die zijn verbonden aan de verloskamer, hoeveel van deze verpleegkundigen/gezondheidswerkers zijn formeel opgeleid in IYCF+ (voor het ziekenhuis)?] Note:- For RGD Clinic just write the total number of trained nurses for IYCF+ as there is no Labor room in RGD Clinic [Noot: Schrijf voor RGD- klinieken gewoon het aantal in IYCF+ opgeleide verpleegkundigen op, daar er geen verloskamer is in RGD -klinieken]		
3	After how much time post (normal) delivery are the mothers encouraged to initiate breast-feeding in the facility? [Hoe lang na een (normale) bevalling worden moeders gestimuleerd om te starten met borstvoeding in de instelling?]	☐ Within 24 hours ☐ Within 1 hour ☐ After 24 hours ☐ Don't Know	
4	Are you aware that a National Infant Feeding Task Force formed to end sale of Formula food in Clinics? [Bent u ervan op de hoogte dat er een Nationale Taskforce voor Babyvoeding is ingesteld voor het stopzetten van de verkoop van Kunstmatige babyvoeding in Klinieken?]	☐ Yes ☐ No	*Mark Yes only if official is able to tell any key feature/component of IYCF+ communication strategy*
5	Have you/your facility ever been approached by any company for promotion of breast Milk-substitute products? If Yes, Brand name [Bent u/is uw instelling ooit benaderd door een bedrijf voor de promotie van	☐ Yes ☐ No	

	vervangingsproducten voor borstvoeding? Indien ja, naam merk]		
6	Are you aware that BOG is advocating for Paid Maternity Leave benefit for working women? If yes, how? probe:- News paper letter for companies by Doctors/Nurses association for 14 weeks paid maternity leave plus shorter working days for babies under 6 months [Bent u ervan op de hoogte dat BOG pleit voor betaald moederschapsverlof voor werkende vragen. Zo ja, hoe? Vraag door: Brief in de krant voor bedrijven door Artsen/Verpleegkundigen voor 14 weken betaald moederschapsverlof en kortere werkdagen voor baby's jonger dan 6 maanden]	☐ Yes ☐ No	
7	Have you seen the IYCF+ DVD series? Is it being available for daily viewing at Health Facility waiting areas? If No, why? [Heeft u de IYCF+ serie op DVD gezien? Is het dagelijks te zien in de wachtkamers van de Gezondheidsinstelling? Zo niet, waarom niet?]	☐ Yes ☐ No	
8	Have you heard or seen Radio or TV talk shows featuring IYCF+. [Heeft u op de radio of de tv praatprogramma's gehoord of gezien waarbij IYCF+ het gespreksonderwerp was?]	☐ Yes ☐ No	

9	Are you aware of any promotional materials related to IYCF+ such as TV/Radio spots, Poster, News paper, Revised Face book & BOG website, Breastfed Baby Stickers, Baby Toddler Book? If Yes, which materials have you seen? [Bent u bekend met promotiemateriaal van IYCF+ zoals tv/radio spotjes, posters, krant, herziene Facebook pagina & BOG website, stickers van baby's die borstvoeding krijgen, baby peuter boek? Zo ja, welk materiaal heeft u gezien?]	☐ Yes ☐ No	
10	What are the challenges to make hospitals/clinics baby friendly". [Wat zijn de uitdagingen voor het babyvriendelijk maken van ziekenhuizenhuizen/klinieken?] Probe: administrative challenges, social & behaviour, technical, financial, Human resources etc. [Vraag door: administratieve uitdagingen, uitdagingen gerelateerd aan sociale aspecten & gedrag, financiële uitdagingen, uitdagingen op het gebied van personeel, etc.]	☐ Lack of proper infrastructure ☐ Untrained HR ☐ Inadequate compliance with quality parameters ☐ Inadequate access to the facility ☐ Annual financial allocation is not enough ☐ Rude behaviors of clinical and non-clinical staff ☐ Lack of entitlement-based services ☐ Others…….	
11	How to overcome the mentioned bottlenecks, what's the practical way forward. [Hoe kunnen de genoemde knelpunten worden overwonnen, wat zijn praktische vervolgstappen?]	☐ Ensuring availability of infrastructure and HR according to population norms ☐ Ensuring mechanism of compliance of quality of care ☐ Setting a grievance redressal mechanism	

		☐ Periodic refresher training of both clinical and non-clinical staff ☐ Others…….	
12	What are the communication materials on IYCF+ programme available in the hospital/ clinic for display? [Welke communicatiematerialen over IYCF+ programma's zijn beschikbaar in het ziekenhuis/de kliniek om te laten zien?]	☐ Display of banners/ charts etc. on various components of IYCF ☐ Live scrolls on TV installed in waiting area ☐ Distribution of IEC materials to clients attending the clinic/ hospital ☐ Others…….	

Signature By: Duty Bearer/In charge _____

Section-C Nurse/Health Worker Interview

S. No	Question	Responses	Remarks
About early initiation of breastfeeding, pre-lacteal feeds and micronutrient supplementation.			
1	When is the mother discharged after a normal delivery in your facility? [Wanneer wordt de moeder ontslagen na een normale bevalling in uw instelling?]	☐ Within 4 hours ☐ 4 to 24 hours ☐ 24 to 48 hours ☐ After 48 hours ☐ Don't Know	
2	What do you understand by early initiation of breastfeeding? [Wat verstaat u onder vroeg starten met borstvoeding ?]	☐ Within 1 hours ☐ Within 24 hours ☐ After 24 hours ☐ Don't Know	
3	IN YOUR OPINION, WHAT IS THE FIRST FOOD OR LIQUID A NEWBORN BABY SHOULD RECEIVE? [WAT IS VOLGENS U HET EERSTE VOEDSEL OF DE EERSTE VLOEISTOF DIE EEN PASGEBOREN BABY ZOU MOETEN KRIJGEN?]	ONLY MOTHER'S MILK/BREAST MILK.....11 BREASTMILK THAT COMES AFTER COLOSTRUM (3RD / 4TH DAY) .....12 PLAIN WATER .....13 SUGAR OR GLUCOSE WATER.....14 GRIPE WATER.....15 INFANT FORMULA MILK .....16 FRUIT JUICE.....17 TEA/INFUSIONS.....18	

	SELECT ALL THAT ARE MENTIONED [SELECTEER ALLES DAT IS GENOEMD] ***DO NOT PROMPT.*** ***[GEEN HINTS GEVEN]*** ***PROBE FULLY BY ASKING:*** [***VRAAG GOED DOOR EN VRAAG:]*** ***Anything else? Anything else?*** *[Verder nog iets anders? Was er verder nog iets?*] **Multiple Response Possible** **[Meerdere antwoorden mogelijk]**	COFFEE .....19 HONEY .....20 HOMEMADE SYRUP/FLUIDS .....21 JAGGERY .....22 ANIMAL MILK .....23 TRADITIONAL MEDICINE .....25 OTHER (SPECIFY_____).....97 REFUSED.....98 DON'T KNOW……99	
4	What do you know about the first part of breast milk, which is thick & yellow? *Probe: Is it good or bad? Why?* [Wat weet u van de eerste borstmelk, die dik en geel is. *Vraag door: Is dit goed of slecht? Waarom*?]	CRITICAL FOR THE HEALTH OF THE NEW BORN .....A FIRST VACCINE FOR THE BABY & IMPROVEs THE IMMUNITY .....B PROMOTE THE GROWTH AND HEALING OF SKIN, BONES, MUSCLES .....C REDUCE PAIN AND INFLAMMATION.....D ENHANCE MENTAL ALERTNESS AND OVERALL SENSE OF WELL-BEING.....E HELPS IN REDUCING THE INCIDENCE OF JAUNDICE .....F MAKES THE BABY STRONG AND HEALTHY .....G ADVISED BY ANM .....H I WAS TOLD ABOUT THIS IN A TRAINING/MEETING THAT I ATTENDED I THE DOCTOR / MEDICAL PRACTITIONER PRESCRIBES TO DO SO.....J OTHER (SPECIFY_____).....X REFUSED.....Y DON'T KNOW …… Z	
5	Can you describe benefits of colostrum's feeding? **(Multiple select possible)**	☐ Helps in early passing of stool and prevent jaundice ☐ Rich in antibodies & vitamins	

	[Kunt u de voordelen omschrijven van het voeden met colostrum? **(Er kunnen meerdere geselecteerd worden)**]	☐ Enhance immunity ☐ All of above ☐ Don't Know	
6	How do you recognize that breastfeeding is adequate for the baby? [Hoe ziet u dat de borstvoeding voldoende is voor de baby?]	☐ Urine output and weight gain ☐ Stool ☐ Crying ☐ By abdominal fullness ☐ Don't Know	
7	How frequently should the mother Breastfed her child? [Hoe vaak zou een moeder haar kind borstvoeding moeten geven?]	☐ Every 4 hours ☐ Whenever the baby cries ☐ On demand/ Every 2 hours ☐ Don't Know	
8	How long expressed breast-milk can be used at normal temperature? [Hoe lang kan afgekolfde borstvoeding worden gebruikt als het wordt bewaard op de normale temperatuur?]	☐ Less than 1 hr ☐ 2-3 hrs ☐ 6-8 hrs ☐ Within 24 hrs ☐ Don't Know	
9	Till what age should breast feeding be continued? [Tot welke leeftijd zou borstvoeding moeten worden gegeven?]	☐ Till 6 Months ☐ One year ☐ 2 years and more ☐ Don't Know	
10	What is the appropriate time to introduce Complementary feeding? [Na hoe lang zou het goed zijn om te starten met Aanvullende voeding?]	☐ Any time before 6 months ☐ After 6 months ☐ Don't Know	

11	How much duration after delivery, are infants placed in skin-to-skin contact with their mother? [Hoe lang na de bevalling worden baby's bij hun moeder gelegd op een manier dat sprake is van huid-op-huid contact?]	☐ Immediately ☐ Within half an hour ☐ Did not place ☐ Don't know	Immediately means within 10-15 mins of delivery
12	At the time of discharge, where do you suggest the mother to go in case of lactation/feeding problem? [Wanneer de moeder wordt ontslagen, waar beveelt u de moeder aan om naartoe te gaan ingeval van lactatie/voedingsproblemen?]	☐ Health Facility/Clinic ☐ Community level health workers ☐ Do not suggest	
About Exclusive Breast Feeding, Complementary Feeding, Challenges, Learnings & Way Forward			
13	What do you know about exclusive breastfeeding? [Wat weet u over exclusieve borstvoeding/ het uitsluitend geven van borstvoeding?]	☐ It is very important for physical and physiological development of child. ☐ Putting baby on (only) mothers' milk for first 6 months ☐ It is combination of BF along with complementary feeding for first 6 months ☐ Others…….	
14	What are the sources of your knowledge about exclusive breast-feeding? [Wat zijn uw informatiebronnen van u kennis wat betreft het uitsluitend geven van borstvoeding?] Probe: whether s/he get some training or she got knowledge in nursing school or she read some book and get the knowledge or any other source.	☐ Training on IYCF+ ☐ Knowledge from Nursing school ☐ Read books & get the knowledge on Exclusive Breast Feeding ☐ No knowledge ☐ Other source …….please mention it.	

	[Vraag door: of zij/hij training heeft gekregen hierover of dat ze de kennis heeft opgedaan tijdens de verpleegkundigenopleiding of dat ze een boek heeft gelezen waaruit ze deze informatie heeft gehaald of een andere informatiebron]		
15	What do you teach mothers and other care givers in the family like father, mother-in-law about babies under the age of 6 months? [Wat leert u moeders en andere verzorgers in de familie zoals de vader, schoonmoeder over baby's onder de 6 maanden?]	BREASTFEEDING ..... A EXCLUSIVE BREAST-FEEDING .....B DIARRHOEA .....C FEVER ..... D CONVULSION .....E REFERRAL .....F GROWTH MONITORING ..... G AGE APPROPRATE VACCINATION ..... H OTHERS ..... X DON'T KNOW……	
16	What is the reason according to you why mothers stop breastfeeding? [Wat is volgens u de reden dat moeders stoppen met het geven van borstvoeding?]	☐ Mothers think that it not necessary to BF the baby ☐ BF has no benefits for mother ☐ BF causes laxity to breast ☐ They are very prompt to give complementary feeding. ☐ Others…….	
17	What do you advise mothers if faced with the following? i. Mother says she can't breastfeed [Moeder geeft aan dat zij geen borstvoeding kan geven] ii. Mother says that baby less than 6 months old needs water	☐ BF is must for a healthy baby ☐ It helps mother in reducing size of the uterus ☐ Others…….. ☐ Giving water during first 6 months may causes GI infection ☐ Giving water during first 6 months has no contribution in prevention of dehydration ☐ Others……	

	[Moeder zegt dat baby van jonger dan 6 maanden water nodig heeft] iii. Mother buys infant formula feeds for child less than 6 months old [Moeder koopt kunstmatige babyvoeding voor een baby van jonger dan 6 maanden oud] iv. A child is malnourished [Een baby is ondervoed] v. If a mother has conflicting messages about proper breastfeeding practices from other health professionals or from her relatives [Als een moeder tegenstijdige informatie krijgt over juiste borstvoedingspraktijken van andere gezondheidsdeskundigen of van haar familieleden]	☐ Infant formula is not healthy for babies ☐ Benefits portrait while selling these products are not scientific ☐ Others ☐ Deworming of the child ☐ Counselling on healthy diets ☐ Age appropriate immunization ☐ Others…… ☐ Give scientific references towards the facts ☐ Try to eliminate misinformation by explaining benefits of correct practices ☐ Others……	
19	If a child is Sick and not eating much How You teach Mothers to feed a Child with Complimentary foods? [Als een kind ziek is en niet veel eet, hoe leert u moeders om een kind Aanvullende voeding te geven?]	☐ Do not stop BF ☐ Give easily digestible food ☐ Visit a clinic/ hospital if the problem persists ☐ Others…….	

20	What factors can lead to a delay in starting complementary foods later than 6 months after birth? [Welke factoren kunnen ertoe leiden dat laat wordt gestart met aanvullende voeding, later dan 6 maanden na de geboorte?]	☐ Lack of awareness on complementary feeding ☐ Unavailability of recommended formulae ☐ Others…….	
21	Do you ever talk to parents about hand washing? What do you tell them? [Praat u ooit met ouders over het wassen van de handen? Wat zegt u hierover aan ze?] *Probe: What do you teach mothers about using water & soap for hand washing?* [*Vraag door: Wat leert u moeders over het gebruiken van water & zeep voor het wassen van de handen*?]	☐ Yes ☐ No ☐ Handwashing is very important while handling the baby ☐ Always use soap for hand washing ☐ Always wash hand while feeding the child ☐ Others……..	
22	What information materials are available at the health facility? [Welk informatiemateriaal is er beschikbaar in de gezondheidsinstelling?] *Probe: Have these been made available to the mothers?* [*Vraag door: Zijn deze beschikbaar gesteld voor de moeders*?]	☐ Display of IEC materials at the facility ☐ Distribution of information materials like pamphlets etc. to the mothers ☐ TV scrolls in the waiting areas ☐ Others…….	
23	How do you introduce information materials to a mother? Do you spend time explaining them or give her to look at later? [Hoe geeft u het informatiemateriaal aan een moeder? Neemt u de tijd om het materiaal uit te leggen of geeft u	☐ Through flip charts ☐ Referring to the facility level counselor ☐ Others…….. ☐ Yes ☐ No	

	het aan haar zodat zij het later kan doornemen?]		
25	What advice do you have about a breastfeeding mother who has to go to work? [Welke advies heeft u voor een moeder die borstvoeding geeft en die moet gaan werken?]	☐ Put your baby on BF as much as you can before leaving for work ☐ If possible, come to the baby to BF in between the work hours ☐ Do not keep you baby without BF for more than 3 hours ☐ Others…….	
26	How frequently should growth monitoring of the child should be done? [Hoe frequent moet de groei van een kind worden gemonitord?]	☐ Monthly ☐ Bi-monthly ☐ Biannually ☐ Annually ☐ Others……	
27	What do you advise about the care of low birth weight newborns? [Wat voor advies geeft u over de zorg voor pasgeboren baby's met een laag geboortegewicht?]	☐ Keep the baby warm ☐ Initiation of BF as early as possible ☐ Keep an eye on any unusual movement of the baby ☐ Seek medical care if baby do not stop crying or stop BF. ☐ Others……..	
29	Are government policies favorable for child feeding? And what should the government do to promote breastfeeding? [Is het overheidsbeleid gunstig voor het geven van borstvoeding aan baby's? En wat zou de overheid moeten doen om het geven van borstvoeding te bevorderen?]	☐ Yes ☐ No ☐ Policy to promote BF at facility and community ☐ Maternity benefits for BF for working women ☐ Frontline workers to eb in centre-stage for promoting BF ☐ Others……..	
30	Are you aware of any initiative by BOG to promote Breast Feeding? If Yes, kindly explain [Bent u bekend met initiatieven van BOG voor de bevordering van Borstvoeding? Zo ja, graag nader uitleggen]	☐ There are community volunteers visiting HH for promotion of BF ☐ There is special communication strategy for promotion of BF ☐ Others…….	

31	Are you aware of the National Code on Marketing of Breast Milk substitutes under which sale of commercial product/promotional material can be prohibited? [Bent u bekend met de Nationale Code inzake Marketing van vervangingsproducten voor Borstvoeding, op basis waarvan de verkoop van commerciële producten/promotiemateriaal kan worden verboden?]	☐ Yes ☐ No	
32	Who has the final say in decisions affecting the family? [Wie heeft het laatste woord wanneer het gaat om beslissingen die de familie betreffen?] (Multiple Answers possible) [Meerdere antwoorden mogelijk]	☐ Father ☐ Mother ☐ Mother in Law ☐ Father in Law ☐ Sister in Law ☐ Relatives ☐ Neighbor ☐ Religious Leader of the community	
33	What are the challenges among mothers/caregivers for not following the principle of exclusive breast feeding? [Wat zijn de uitdagingen onder moeders/verzorgers waardoor ze zich niet houden aan het principe van het uitsluitend geven van borstvoeding?]	☐ They are less sensitive to the importance of exclusive BF ☐ Mothers are working and can't spend much time for EBF ☐ Supplementary formulae are easily available and mothers find it easy to introduce ☐ Others……..	
34	How you succeed in mobilizing the mothers/caregivers for successful initial feeding & exclusive breast feeding. [Hoe krijgt u moeders/verzorgers zover dat ze succesvol de eerste borstvoeding geven & uitsluitend borstvoeding geven?]	☐ Mobilizing community level workers ☐ Community level campaign with influential people ☐ Counselling of mothers at facility/ clinics ☐ Others……	

35	Based on your experience, what are the facility and community level communication materials being made available by BOG for raising awareness among communities on different interventions under IYCF+ initiative? [Kunt u aangeven, op basis van uw ervaring, welke communicatiematerialen beschikbaar worden gemaakt door BOG aan de instelling en de gemeenschap voor het creëren van awareness onder gemeenschappen over verschillende interventies van het IYCF+ initiatief?]	☐ Pamphlets ☐ Leaflets ☐ Calendars ☐ Promotional massages to their mobiles ☐ Others……....	

Signature by Nurse/Health Worker----------

Section D- Midwife Interview

S. No.	Questions	Midwife 1	Midwife 2	Midwife 3
1	What is the appropriate time to initiate Breast Feeding (BF)? [Wat is het juiste moment om te starten met Borstvoeding (BF)?]	☐ Within 24 hours ☐ Within 1 hour ☐ When baby wants ☐ Don't know	☐ Within 24 hours ☐ Within 1 hour ☐ When baby wants ☐ Don't know	☐ Within 24 hours ☐ Within 1 hour ☐ When baby wants ☐ Don't know
2	When should water be introduced to child [Wanneer zou een baby voor het eerst water moeten krijgen?]	☐ After 6 months ☐ Before 6 months ☐ Don't know	☐ After 6 months ☐ Before 6 months ☐ Don't know	☐ After 6 months ☐ Before 6 months ☐ Don't know
3	How frequently should mothers Breast Fed (BF) their children?	☐ Every 4 hours ☐ When baby cries ☐ 2 hourly/ on demand	☐ Every 4 hours ☐ When baby cries ☐ 2 hourly/ on demand	☐ Every 4 hours ☐ When baby cries ☐ 2 hourly/ on demand

	[Hoe vaak zou een moeder haar baby borstvoeding moeten geven?]	☐ Dont Know	☐ Dont Know	☐ Dont Know
4	Till what age should mother continue breastfeeding [Tot welke leeftijd zou een moeder borstvoeding moeten geven ?]	☐ One year ☐ 6 Months ☐ 2 years and more ☐ Dont Know	☐ One year ☐ 6 Months ☐ 2 years and more ☐ Dont Know	☐ One year ☐ 6 Months ☐ 2 years and more ☐ Dont Know

Section E - Observations

S. No	Observation	Response	Remarks
1	IEC on IYCF+ displayed (Maternity Ward)	☐ Yes ☐ No	
2	IEC on IYCF+ displayed (ANC Clinics/OPD)	☐ Yes ☐ No	
3	Information on use of infant formula on Health Facility is available [Informatie beschikbaar over het gebruik van kunstmatige babyvoeding in de Gezondheidsinstelling]	☐ Yes ☐ No	
4	Counseling on IYCF during ANC (ANC Clinics/OPD)	☐ Yes ☐ No	
5	Any Help Desk available in the premises for mothers and other caregivers of the family? [Is er een helpdesk/supportafdeling beschikbaar op de locatie voor moeders en andere verzorgers in de familie]	☐ Yes ☐ No	

Section-F Mothers' Interview with Children under 6 Months related to Early & Initial Breast Feeding)

S.No.	Questions	Mother-1	Mother-2
1	What type of delivery did you have? [Wat voor soort bevalling heeft u gehad?]	☐ Normal ☐ Caesarean	☐ Normal ☐ Caesarean
2	How long after birth did you first hold your baby? [Hoe lang na de geboorte heeft u uw baby vastgehouden?]	☐ Have not held yet ☐ Within labor room ☐ After shifting to ward	☐ Have not held yet ☐ Within labor room ☐ After shifting to ward
3	Have you initiated breastfeeding? If no, why? [Bent u begonnen met het geven van borstvoeding? Zo nee, waarom niet?]	☐ Yes ☐ No	☐ Yes ☐ No
4	When Did you breastfeed your child for the first time after birth? [Wanneer heeft u het kind voor het eerst borstvoeding gegeven na de geboorte?]	☐ Not started yet ☐ Within 1 hour ☐ Within 24 ☐ Not applicable ☐ Other _____	☐ Not started yet ☐ Within 1 hour ☐ Within 24 ☐ Not applicable ☐ Other _____
5	What do you know about the first part of breast milk, which is thick & yellow? *Probe: Is it good or bad? Why?* [Wat weet u van de borstmelk die als eerst uit de borst komt, die dik & geel is? *Vraag door: Is dit goed of slecht? Waarom?]*	☐ It improves immunity of newborns ☐ It is good for the physical and physiological growth of the baby ☐ It shouldn't be wasted and must be given to the baby ☐ Others……	☐ It improves immunity of newborns ☐ It is good for the physical and physiological growth of the baby ☐ It shouldn't be wasted and must be given to the baby ☐ Others……
6	What do you normally do with this first part? *Probe:* [Wat doet u normaal gesproken met deze melk die als eerst uit de borst komt?]	☐ Give it to Child ☐ Throw Away	☐ Give it to Child ☐ Throw Away

7	What have you fed your child since birth? **(Multiple select possible)** [Waarmee heeft u uw baby gevoed sinds de geboorte?] (**Meerdere antwoorden mogelijk)**	☐ Only breast milk ☐ Infant formula ☐ Water or any other thing ☐ Nothing	☐ Only breast milk ☐ Infant formula ☐ Water or any other thing ☐ Nothing
9	Do you have bottle or Cup for feeding the child? [Heeft u een fles of cup om de baby te voeden ?]	☐ Yes ☐ No	☐ Yes ☐ No
10	Did anybody in the hospital/clinic provided advice/support related to breastfeeding? **(Multiple select possible)** [Heeft iemand in het ziekenhuis/de kliniek advies/hulp gegeven met betrekking tot borstvoeding?] (**Meerdere antwoorden mogelijk)**	☐ In charge or Head ☐ Nurse/Health worker ☐ Midwife ☐ No support provided till now	☐ In charge or Head ☐ Nurse/Health Worker ☐ Midwife ☐ No support provided till now
11	What advice have you been given on how often to feed your baby? [Wat voor advies heeft u gekregen over hoe vaak u uw baby moet voeden?]	☐ No advice given ☐ Every hour ☐ Every 1-2 hours	☐ No advice given ☐ Every hour ☐ Every 1-2 hours
12	Who will you approach for advice/support for Breast Feeding in your community **(Multiple select possible)** [Naar wie gaat u voor advies/hulp bij het geven van borstvoeding in uw gemeenschap?] (**Meerdere antwoorden mogelijk)**	☐ Health Worker ☐ Mother- in- law ☐ Grand mother ☐ Don't Know ☐ Husband ☐ Other elderly women from the family ☐ NGO reps ☐ Religious leaders	☐ Health Worker ☐ Mother- in- law ☐ Grand mother ☐ Don't Know ☐ Husband ☐ Other elderly women from the family ☐ NGO reps ☐ Religious leaders

Section-G Mothers' Interview with Children under 6 Months related to Exclusive Breast Feeding

S. No.	Questions	Mother-1	Mother-2
1	What is the age of the Child in Months? [Hoeveel maanden oud is de baby? (antwoord noteren in maanden]		
2	What is the optimal age duration for exclusive breastfeeding, which is, not giving your baby water, infant formula or other food? [Wat is de optimale leeftijd voor tot wanneer een baby uitsluitend borstvoeding krijgt? Dat wil zeggen, u geeft uw baby geen water, kunstmatige babyvoeding of ander voedsel.]		
2	What are the sources of your knowledge about exclusive breast-feeding? (social media, radio, TV, poster, banner, flyer, baby toddler book, any other (Multiple answer possible) [Wat zijn uw informatiebronnen voor uw kennis van het uitsluitend geven van borstvoeding? (social media, radio, tv, poster, banner, flyer, baby peuter boek, iets anders] (Meerdere antwoorden mogelijk)	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….
3	Apart from breast milk, what else are you feeding your baby? *Probe: water? Infant formula? Other foods? Etc……* [Behalve borstvoeding, wat geeft u uw baby nog meer?] *Vraag door: Water? Kunstmatige babyvoeding? Andere voeding? Etc….*		

5	What determines your decision about giving your baby water in addition to breast milk? *Probe: beliefs? Who decides in your family what to give to a new baby?* [Waardoor wordt uw beslissing bepaald over het geven van water aan uw baby naast borstvoeding? *Vraag door: Geloofsovertuigingen? Wie in uw familie beslist wat een pasgeboren baby gevoed moet worden?]*		
6	Do you also give infant formula food to your baby? If Yes, *Why? Where did you hear about giving infant formula food to the baby? Probe:-* [Geeft u ook kunstmatige babyvoeding aan uw baby? Zo ja, *waarom? Waar heeft u gehoord over het geven van kunstmatige babyvoeding aan de baby? Vraag door:*]	☐ At home/ community ☐ Outreach sessions ☐ Clinics/ facility ☐ Others…….	☐ At home/ community ☐ Outreach sessions ☐ Clinics/ facility ☐ Others…….
7	How many times a day do you breastfeed your baby? *Probe: do you feed baby on demand, which is as many times as baby wants to suck more?* [Hoe vaak per dag geeft u uw baby borstvoeding? *Vraag door: voedt u uw baby op verzoek, dat wil zeggen zo vaak als de baby meer wil zuigen?*]		
8	What can make you give only breast milk and nothing more, even water, until baby is 6 months old? [Wat zou u doen besluiten om uw baby alleen borstvoeding en	☐ Doctors advised to do so ☐ More caring about baby ☐ Others……..	☐ Doctors advised to do so ☐ More caring about baby ☐ Others……

	niets anders te geven, zelfs geen water, totdat de baby 6 maanden oud is?]		
9	**Opening statement:** *Sometimes mothers have to leave their baby, perhaps to go to work; at such times, one way of continuing breastfeeding is to express it and store it so that someone else can feed your baby.* [**Stelling:** *Soms moeten moeders hun baby's achterlaten, misschien om naar het werk te gaan, en op die momenten is de enige manier om door te gaan met het geven van borstvoeding om het af te kolven en te bewaren zodat iemand anders uw baby te eten kan geven*?] **Question:** Is this something you have ever done? If no, why not? If yes, how do you do it? How do you ensure that the milk is kept safe? Who feeds the baby in your absence? [**Vraag:** Is dit iets dat u ooit heeft gedaan? Zo nee, waarom niet? Zo ja, hoe doet u dit? Hoe zorgt u ervoor dat de melk op een veilige manier wordt bewaard? Wie geeft de baby eten wanneer u er niet bent?]		
10	If perhaps, you suddenly became sick or the baby got sick, how would this affect breastfeed your baby? [Als u plotseling ziek zou worden of de baby ziek zou	☐ I stopped BF ☐ Periodicity/ interval of BF reduced ☐ Put on complementary feeding	☐ I stopped BF ☐ Periodicity/ interval of BF reduced ☐ Put on complementary feeding Others…….

	worden, welke invloed zou dit hebben op het geven van borstvoeding aan uw baby?]	☐ Others…….	
13	Who in your family has the final say in decisions affecting your baby's health and nutrition? [Wie in uw familie heeft het laatste woord wanneer het gaat om beslissingen die van invloed zijn op de gezondheid en voeding van uw baby?]	☐ Myself ☐ Father ☐ Mother ☐ Father-in-law ☐ Mother-in-Law ☐ Husband ☐ Others……	☐ Myself ☐ Father ☐ Mother ☐ Father-in-law ☐ Mother-in-Law ☐ Husband Others……
15	Did you see any public information promoting Breast Feeding? If Yes, which medium and where? *Probe further, What about TV? Radio? Newspapers? Mobile Phone? Internet? Any Print material like baby toddler book or other* [Heeft u openbare informatie gezien voor de promotie van borstvoeding? Zo ja, welk medium was dit en waar? *Vraag verder. En hoe zit dit met tv? Radio? Kranten? Mobiele telefoon? Internet? Geprint materiaal zoals baby peuterboek of iets anders*]	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….
16	What print materials about child care, or child feeding have you seen? *Probe: Have you seen the Baby en Peuterboek? Have you seen any other printed books, leaflets or posters? Where have you seen the print materials (at home or in clinics)?*	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……

	[Wat voor gedrukt materiaal heeft u gezien over babyzorg en babyvoeding? *Vraag door: Heeft u het Baby en Peuterboek gezien? Heeft u andere gedrukte boeken, brochures of posters gezien? Waar heeft u het gedrukt materiaal gezien? (thuis of in de klinieken?*]		
17	What do you understand about child feeding from these print materials? *Probe: What changed in your child feeding practice after reading these materials?* [Wat begrijpt u over het voeden van baby's uit dit gedrukt materiaal? *Vraag door: Wat is er veranderd in de voedingspraktijken die u gebruikt voor uw baby na het lezen van dit materiaal?*]	☐ I become more sensitize towards baby's nutrition ☐ I started safe practices like handwashing while feeding the baby ☐ Others…….	☐ I become more sensitize towards baby's nutrition ☐ I started safe practices like handwashing while feeding the baby ☐ Others……
18	Are you satisfied with the way health workers communicate health messages? Is there anything about the health worker that you are not satisfied about? [Bent u tevreden over de manier waarop gezondheidswerkers berichten wat betreft gezondheid communiceren? Is er iets van de gezondheidswerker waar u niet tevreden over bent?]	☐ They don't give adequate time during HH visits ☐ They don't carry requisite IEC materials with them ☐ Others…….	☐ They don't give adequate time during HH visits ☐ They don't carry requisite IEC materials with them ☐ Others…….
19	Have you ever gone to a traditional healer to talk about your child's health? Or a faith healer? *Probe: What makes you go to them?*	☐ They have good reputation in my local area ☐ Head of the HH suggested	☐ They have good reputation in my local area ☐ Head of the HH suggested

	[Bent u ooit naar een traditionele genezer gegaan om te praten over de gezondheid van uw baby? *Vaag door: Wat is de reden dat u naar een traditionele heler gaat?*]	☐ Available near to my house ☐ Others…….	☐ Available near to my house ☐ Others…….

Section-H Mothers' Interview with Children 7 Months to 2 Years

Sn	Questions	Mother-1	Mother-2
1	Do you still breastfeed your baby? [Geeft u nog steeds borstvoeding aan uw baby?]		
2	At what age should a baby no longer breastfeed at all? [Op welke leeftijd zou een baby helemaal geen borstvoeding meer moeten krijgen?]		
3	What could be the reasons why mothers stop breastfeeding before baby gets 2 years old? [Wat zouden de redenen kunnen zijn waarom moeders stoppen met het geven van borstvoeding voordat een baby 2 jaar oud is?]	☐ They are working and don't get time to continue BF till 2 years ☐ They don't feel it is important to continue for 2 years ☐ Other……..	☐ They are working and don't get time to continue BF till 2 years ☐ They don't feel it is important to continue for 2 years ☐ Other……..
4	What would help mothers continue to breastfeed longer? [Wat zou moeders helpen om langer door te gaan met het geven van borstvoeding?]	☐ Mothers should be sensitized periodically towards BF ☐ Working ladies should be given flexibility to attend their babies for BF ☐ Others……	☐ Mothers should be sensitized periodically towards BF ☐ Working ladies should be given flexibility to attend their babies for BF ☐ Others……
5	What do you feed your baby with in addition to breast milk now? *Probe for answers such as water, infant formula, soft*	☐ Minced potato ☐ Pulses ☐ Rice ☐ Infant formula ☐ Others……..	☐ Minced potato ☐ Pulses ☐ Rice ☐ Infant formula Others……..

	foods, or maybe nothing at all except breast milk. [Wat gebruikt u nog meer als voeding voor uw baby naast borstvoeding op dit moment? *Vraag door voor antwoorden zoals water, kunstmatige babyvoeding, zachte voeding, en misschien helemaal niets anders behalve borstvoeding*]		
6	What age was your baby when you started adding these other foods? *And water also?* [Hoe oud was uw baby toen u begon met het geven van deze voedingen? *En ook water*?] Why did you start at that age? [Waarom bent u op die leeftijd begonnen?]	☐ After 6 months ☐ Before 6 months ☐ After a year ☐ Advised by Doctors ☐ Advised by community workers ☐ Recommended by family members ☐ Others ……	☐ After 6 months ☐ Before 6 months ☐ After a year ☐ Advised by Doctors ☐ Advised by community workers ☐ Recommended by family members ☐ Others ……
7	How many times per day are you feeding your baby with these other foods? *Probe: do you feed baby on demand, which is as many times as baby wants to eat more?* [Hoe vaak per dag geeft u uw baby deze andere voedingen? *Vraag door: voedt u uw baby op verzoek, dat wil zeggen zo vaak als de baby meer wil eten?*]	☐ Twice a day ☐ 4 times in a day ☐ 6 times in a day ☐ When baby cry ☐ Others……	☐ Twice a day ☐ 4 times in a day ☐ 6 times in a day ☐ When baby cry ☐ Others……
8	What are the common other foods for feeding babies? *Probe: what about other foods such as beans, legumes, or fish?*	☐ Beans ☐ Meat ☐ Fish ☐ Legumes ☐ Fruits ☐ Vegetables ☐ Others…….	☐ Beans ☐ Meat ☐ Fish ☐ Legumes ☐ Fruits ☐ Vegetables ☐ Others…….

	Also probe if there are any vegetables or fruits, which are rich in vitamins and minerals. [Wat zijn normale andere voedingen voor het voeden van baby's? *Vraag door: hoe zit het met andere voedingen zoals bonen, peulvruchten of vis? Vraag ook hier verder of er fruit of vruchten worden gegeven welke rijk zijn aan vitaminen en mineralen.*]		
9	How do you get information about feeding baby with other foods? *Probe: who from?* [Hoe krijgt u informatie over het voeden van uw baby met ander voedsel? *Vraag door: van wie?*]	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….
11	What do you wash your hands with? *Probe: water only? Water & soap? Any other substance?* [Waarmee wast u uw handen? *Vraag door: alleen water? Water & zeep? Andere middelen?*]	☐ Water only ☐ Water and soap ☐ Sanitizers ☐ Others……..	☐ Water only ☐ Water and soap ☐ Sanitizers ☐ Others……
13	If water is unsafe for drinking what ways can it be made safer? [Als water niet veilig is om te drinken, hoe kan het veiliger worden gemaakt?]	☐ Boiling ☐ Adding disinfectants ☐ Others……..	☐ Boiling ☐ Adding disinfectants ☐ Others……..
14	Who has the final say in decisions affecting your baby's health and nutrition?	☐ Myself ☐ Father ☐ Mother ☐ Father-in-law	☐ Myself ☐ Father ☐ Mother ☐ Father-in-law

	[Wie in uw familie heeft het laatste woord wanneer het gaat om beslissingen die van invloed zijn op de gezondheid en voeding van uw baby?]	☐ Mother-in-Law ☐ Husband ☐ Others……	☐ Mother-in-Law ☐ Husband ☐ Others……
16	Have You heard or seen any Public Information on what/how to feed a child after 6 months? if Yes, through which medium (TV, Radio, Newspaper, book, flyer, poster or other …….. [Heeft u publieke informatie gehoord over wat/hoe een baby gevoed moet worden na 6 maanden? Zo ja, via welk medium (TV, radio, krant, boek, flyer, poster of anders]	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….	☐ Community level volunteers ☐ Social Media ☐ Clinical staff at facility ☐ News paper ☐ TV ☐ Internet ☐ Display materials ☐ Print materials like pamphlets ☐ Other…….
17	What print materials about child care, or child feeding have you seen? If Yes, where? [Welk gedrukt materiaal over babyzorg of babyvoeding heeft u gezien? Zo ja, waar?]	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……
18	What Learning did you get from such materials to feed your child well?? [Wat heeft u geleerd van dergelijk materiaal voor het goed voeden van uw kind ?]	☐ I become more sensitize towards baby's nutrition ☐ I started safe practices like handwashing while feeding the baby ☐ Others…….	☐ I become more sensitize towards baby's nutrition ☐ I started safe practices like handwashing while feeding the baby ☐ Others…….
19	Have you ever gone to a traditional healer to talk about your child's health? Or a faith healer? *Probe: What makes you go to them?* [Bent u ooit naar een traditionele genezer gegaan om te praten over de gezondheid van uw baby Of	☐ They have good reputation in my local area ☐ Head of the HH suggested ☐ Available near to my house ☐ Others…….	☐ They have good reputation in my local area ☐ Head of the HH suggested ☐ Available near to my house ☐ Others…….

	een gebedsgenezer? *Vraag door*: *Waarom gaat u naar deze?*]		
20	What are the information materials do you keep at your home for future reference? [Welk informatiemateriaal heeft u thuis om in de toekomst te gebruiken als referentiebron?]	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……	☐ Baby care book ☐ Pamphlets ☐ Leaflets ☐ Posters ☐ Calendars ☐ Others……

C. Question for Caregivers like father/mother-in-law, other family member:

1. How parents take care of their children under 2 years of age in your community?
2. Are mothers giving breast milk to the children in first one hour of life? Do mothers feed colostrum to the child? Do mothers in your community giving any pre-lacteal feeds to children?
3. What foods parents are giving to their children after 6 months other than breast milk? How are the food items being given? Are there any taboos related to giving different food items to the children?
4. Do you think that the taboos are prominent in your area? Please explain.
5. Who in the family decides on food items to be given to the young children? Who procures food for young children?
6. Have you heard about diarrhea? According to you what is diarrhea? Is diarrhea among children prevalent in your community? What do you do to treat diarrhea in children?
7. When do people take their children to hospital/health centre?
8. Who generally takes decision regarding health seeking for children?
9. What are your sources of information on child health and nutrition (feeding) care?
10. Do you actively take part in child care including feeding a child? Do you buy food items for your child/ If yes, elaborate what you buy and why?
11. What support do you give to your wife during caring and feeding of your young child?
12. How do you spend time with your child at home including talking, telling stories, playing games?

Thanks for your participation and contribution to the discussion!!

D. Questions for Policy makers

Name:
District:
Official designation:
Role:

Introduction *Currently the practice of appropriate breastfeeding as recommended by the WHO/PAHO & UNICEF for children is low in Suriname. These include feeding infants exclusively with breast milk and the use of appropriate types of food for different age groups. The Bureau of Public Health is implementing an effective communication strategy to promote better practices about child feeding and childcare and make our hospitals/poly clinics baby friendly.*
I would like to seek information from you about how to support the strategy.

Module:1- Ensuring Capacities for Implementation of IYCF+ Communication Strategy

1. *Currently only 3% of mothers in Suriname breastfeed their infants exclusively according to recommended guidelines from WHO/PAHO.*
2. What is your opinion about this?
3. What are the existing policies regarding child feeding?
4. Whether National Infant Feeding Task Force formed as part of existing IYCF+ communication strategy?
5. What's the roles and responsibilities of a communication Officer in roll out of IYCF+ Communication Strategy?
6. Do we have position of Communication Officer under the aegis of BOG?
7. If YES, Is it filled or vacant?
8. Is IYCF + Communi9cation Strategy adopted in Annul Health Action Plan of BOG
9. What about the decision of Annual Media Training provided for journalists on IYCF+ issues?
10. In terms of priority; how urgent is child nutrition among other critical issues such as poverty reduction; education; basic health insurance; food safety or security? Whether National Nutrition Guidelines developed incorporating IYCF+ ?
11. What do you think about the Communication Materials like Discussion Guide, Flip Chart, Baby Toddler book, DVD series for displaying in Hospitals/Clinics, Training of Nurses on IPC methods & use of IEC materials etc. developed under IYCF+?
12. How would you expand the role of health workers so that they can regularly visit mothers at home for effective monitoring of your policies?
13. Are Hospitals/Clinics reporting on early initiation of breastfeeding, what about results to be released and featured in media news etc.? Is there any provision of follow up meetings among various stakeholders to discuss the existing status and challenges?
14. Do you think there should be a dedicated health worker at facilities to assist and counsel mothers on breastfeeding?
15. How about Clinics identifying exclusive breastfeeding mothers as local role model for peer support for other breast-feeding mothers? What community level support available to assist mothers on breastfeeding?

16. How you have promoted the Public Information Activities on IYCF+?

(Probe on:- Healthy Family Logo, Radio/TV spots & talk shows, posters, Newspapers, Revised BOG website & Face book page, Breastfed baby stickers for Cars/Buses)

17. How were the Partnership activities for IYCF+ implemented? (Probe on:-Launch, Head start programmes, role of NGOs, role of ethnic community, Advocacy activities etc.)

Modules:2- Practices

The use of infant formula foods for infants less than 6 months of age may increase the risk of deadly childhood diseases.

18. What is the current policy on use of commercially available infant formula foods?

(Probe:- formation of National Task Force on ending sales of formula from Health Facilities, Editorials from BOG, Letters by Doctors/Nurses association and RGD/Medical Mission Doctors in leading newspapers for ending formula sales from Health Facilities, TV/Radio programmes & MOH letters to Health Facilities for phasing out sales of formula food in Health Facilities)

19. What is your view on advertisements by companies for infant formulas using premises/places in hospitals/poly clinics?

20. Any other Advocacy initiatives for IYCF+?

(Probe:- on maternity leave legislation current status, revised BOG website on need for 14 weeks maternity leave & shorter breaks for working women having U6 months children. Advocacy with Doctors/Nurses association on issuing any letter to companies in favor of Maternity Leave, BOG update on analysis of Preventing Accidents).

Module:3- Constraints & challenges

21. Are there are any gaps between existing breastfeeding policy and implementation?

22. Can you outline possible reasons for such gaps?

I understand that a policy to support the use of hospitals as Baby Friendly centers was signed since 2002. This is known as the Baby Friendly Hospital Initiative or BFHI.

23. To what extent are hospitals providing Baby Friendly services?

24. What can we do to have full compliance with this policy?

Potential support for IYCF+ communication strategy

25. What role would you play in supporting the planned communication strategy about child feeding?

Recommendations

26. How would you suggest that UNICEF and MoH contribute to government's policies about child health and nutrition?

E. Questions for Media house

Module:1- Introduction

Currently the practice of appropriate breastfeeding practices as recommended by the WHO & UNICEF for children is low in Suriname. These include feeding infants exclusively with breast milk and the use of appropriate types of food for different age groups.

The Bureau of Public Health is implementing an effective communication strategy to promote better practices about child feeding and childcare and making Hospitals & Poly Clinics which are Baby Friendly.

I would like to seek information from you about your possible role in supporting the strategy.

Module:2- Knowledge/ Attitudes

1. What programs do you find out that the public watches/ listens to the most?
2. What have been your most successful programs?
3. Which of your programs can best be used as outreaches about issues on child health and nutrition?

Module:3- Practices

4. Do you have any programs that promote child feeding or childcare? What about advertisements? What are these programs?
5. Do you have any health correspondent among your staff?
6. Is he or she trained about child health and nutrition issues?
7. How many times a week do you broadcast about health issues and at what hours?

Module:4- Constraints & challenges

8. In the past have you received any advocacy from health institutions about child feeding or childcare?
9. Do you have any research or planning department or activities to evaluate your successes and challenges?

Module: 5- Potential support for IYCF+ communication strategy

10. In what ways would you propose to include child feeding and childcare issues in your programs?
11. How would you reach other family members apart from mothers e.g. in-laws; female relatives; fathers; husbands etc.
12. What shows would you use? Would you use Commercials? What about jingles and songs? Short films or documentaries? What language would you use?
13. In your experience; are there any celebrities that could use their influence to support your programs about positive child care practices?

Recommendations

14. Are there any attitudes in the public toward health communication that you would you like to see changed?
15. What involvement do you need from government; other public institutions and CBOs?

F. Questions for NGO/FBO/ Community level influencers

Introduction

Currently the practice of appropriate breastfeeding practices as recommended by the WHO & UNICEF for children is low in Suriname. These include feeding infants exclusively with breast milk and the use of appropriate types of food for different age groups.
The Bureau of Public Health is implementing an effective communication strategy to promote better practices about child feeding and childcare and making the Hospitals/Poly Clinics Baby Friendly.
I would like to seek information from you about your possible role in supporting the strategy.

Knowledge

1. What do you know about Exclusive Breast Feeding?
2. Do you currently provide any services that promote child feeding and childcare?

Attitudes

3. What ways do you foresee by which you can use your influence to promote better child feeding practices? *Probe: - Capacity Building of Health Workers & improving the Behaviour of Mothers/Mother-in-Laws at community level.*

Practices

4. Do you have any doctrines against the following?

(a) Letting the mother start breastfeeding the newborn baby immediately after delivery?
(b) Using only breast milk and no water or other food for infants before 6 months?
(c) Starting other foods from age 6 months?

4. At what age do you think a child should no longer continue to breastfeed?
5. To what extent are you involved in communication especially about health issues?
6. To what extent do communities or mothers consider the advice you give?
7. At which venues and times do you communicate with mothers about health issues? Does this include childcare and feeding?
8. Are there any issues about health or feeding of children that you consider to be morally controversial? How does that affect your agenda?

Constraints & challenges;

9. Are there any barriers that limit your effectiveness in child health and nutrition outreaches? Probe on Financial support from BOG for organizing Trainings etc.

Potential support for IYCF communication strategy

10. In what ways would you like to contribute to an effective communication outreach or building the Capacities of Health Workers/Mothers in Behaviour Change Process related to promotion of IYCF+

G. Questions for Project Managers:

1. What's your broad understanding about IYCF+ Communication strategy?
2. Do you think, the interventions are designed according to the need of community?
3. What are the mechanisms of integration between UNICEF & BOG for roll out of communication strategy?
4. How does your plan the roll out mechanism and allocate physical and physical targets for effective implementation of communication strategy?
5. What are the different media do you engage for wide coverage of interventions?
6. What are the governance mechanisms are in place to ensure compliance by the hospitals and clinics on the communication strategy?
7. How do you plan training calendars of service providers to ender services under IYCF+?
8. What are the major challenges at the community level while introducing IEC/ BCC activities?
9. What are your suggestions for improvement in communication strategy approach?