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A Process Evaluation of Integrated Family Planning and Routine Child Immunization Services in Benin

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Bachelor of Arts
University of California, San Diego
2015

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A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Global Health
2018

Abstract

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By Blake Erhardt-Ohren

Objective: The integration of routine childhood immunization and family planning (FP) services (FP/EPI) seeks to provide pathways for increased uptake of both services. This evaluation assessed the implementation of a combined service provision model and experiences of postpartum women seeking services at integrated FP/EPI facilities in Benin.
Methods: We conducted nine focus groups with FP users and non-users in the extended postpartum period. Women were recruited using nurse midwives at seven FP/EPI integrated facilities. We observed FP/EPI sessions at eight representative facilities. We coded focus group discussion data and analyzed them for themes using MAXQDA 12. We analyzed observation data using Microsoft Word and Microsoft Excel.
Results: The focus group participants had a median age of 28 years and three children. Most cited withdrawal as a previous FP method, and those currently using a method cited the Jadelle implant most often. Women in both groups shared generally positive experiences with FP sensitization, but felt that the referral process was confusing. Reasons to start a contraceptive method included: to stop worrying about an unplanned pregnancy, to space births, and to recover from a previous birth. Common reasons to not start a contraceptive included: not receiving a husband's consent, husband not being present at the time the method was offered, and possible contraceptive side effects. Observations revealed that in four out of eight health facilities, FP sensitization did not take place due to staffing shortages. Very few health educators used job aids or referral cards and educational materials were not displayed throughout the health facilities.
Conclusions: Integrated FP/EPI services are feasible and accepted by postpartum women, but require uniform implementation across health facilities, including adequate staff, adapted referral systems, consistent and continuous training for health workers, and engagement activities targeting men in the community.

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ACKNOWLEDGEMENTS

I owe a great debt to a number of people for their assistance in completing this thesis. First, and foremost, I would like to thank Heidi Schroffel and Dr. Roger Rochat, for their inspiration, guidance, and assistance. I would also like to thank Marius Gnintoungbe, Dora Ward Curry, and the rest of the CARE International Benin/Togo and CARE USA staff for their support throughout this project. Lastly, I would like to thank my parents and partner for reading multiple drafts of this thesis, even though public health and SRH are not their specialties, in order to make sure that this writing makes sense to a general audience.

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INTRODUCTION

In Benin, the need for family planning is high. The last DHS reported the majority of women of reproductive age (47%) (WRA[1]) wish to avoid a pregnancy in the next two years, and of these, 33% are not currently using a contraceptive method. An estimated 19% of births between 2007 and 2012 were unplanned.[1] Overall, contraceptive prevalence is low at 12.9%, with use of modern FP methods at just 7.9%.[2] High unmet need and low contraceptive prevalence are associated with closely spaced birth, which can lead to adverse outcomes for both mother and infant.[3] Women in the extended postpartum period[2] are at especially high risk for these outcomes. The World Health Organization (WHO) recommends waiting twenty-four months after a live birth or six months after an abortion (spontaneous or induced) to attempt another pregnancy, in order to reduce the risk for maternal mortality, fetal death, prematurity, low birth weight, and small infant size.[4] In addition to considerations of physical health are those related to the autonomy of women and the extension of their social, political, and economic participation in communities beyond the role of mothering.

Integrated health services, which involve either co-located services with a referral offered on the same day or one service plus a referral to another, are an innovative way to offer services to underserved communities that may face barriers in accessing adequate health services. In particular, integrated FP and infant immunization services have the potential to reduce adverse maternal and infant outcomes, while offering opportunities for empowered decision making among women. Integrated FP/immunization services are often based on routine immunization platforms in contexts where immunization rates are high. One frequently used indicator to

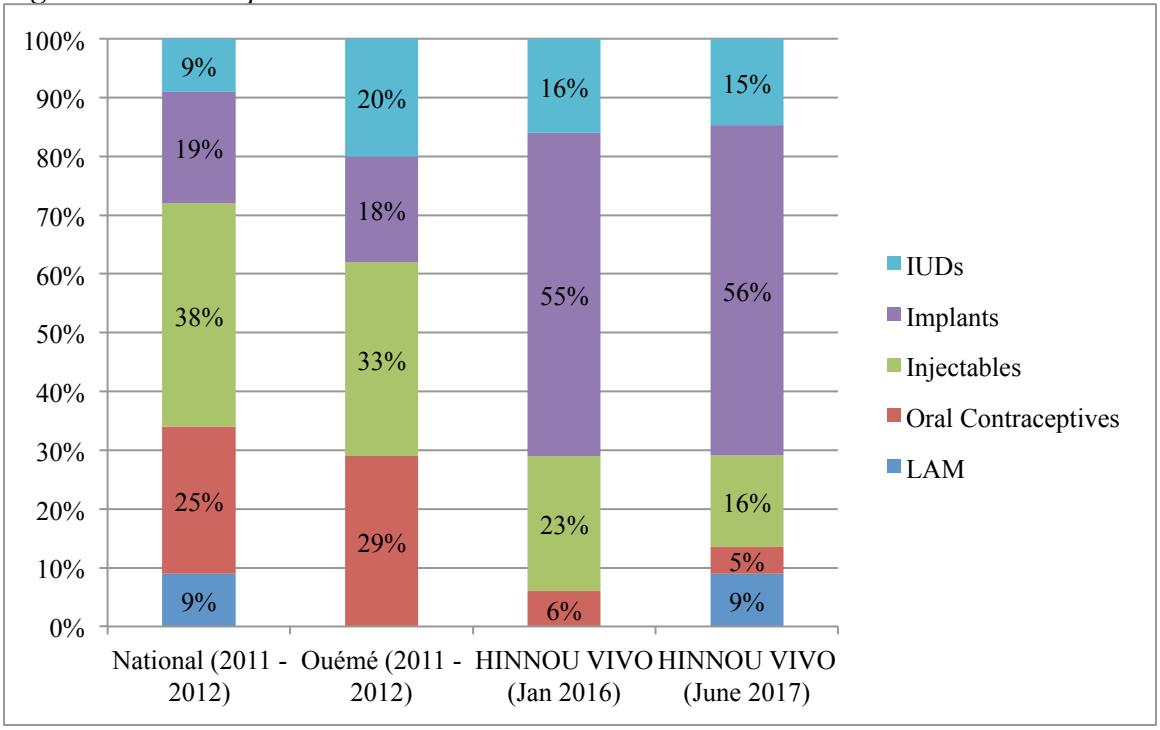
[1] Defined by the DHS as women between the ages of 15 and 49.
[2] Defined here as the twelve months following live birth.

measure immunization performance is DTP3, the third diphtheria-tetanus-pertussis immunization that an infant receives in its first year of life.

The HIN NOU VIVO! (meaning "Wellbeing of the Family" in a local language) Project implemented by CARE in January 2015 addresses gaps in the provision of contraceptive use – with special emphasis on post-partum contraception - through the deliberate integration of FP and routine childhood immunization services in Benin. The project "aims at reducing maternal and child mortality by improving immunization and FP service delivery and creating a supportive environment that encourages sustainable immunization practices and addresses barriers to FP uptake". One of the identified pre-requisites for a useful integrated service delivery system is a strong immunization platform; in Benin, there is high adherence to DTP3 immunization in the first year of life for infants, as of 2011-2012, at 88.3%.[5] The project included twenty (of forty) Ministry of Health facilities serving 128,662 people living within the Adjohoun, Bonou, and Dangbo health zones in the Ouémé Department of southeast Benin. The project was implemented with five main components: provision of competency-based clinical training with follow-up assessment and training, provision of a continuous supply of contraceptives and medical supplies, data-driven facility supervision on a regular basis in partnership with local government health officials, engagement and mobilization of communities, and the integration of the two services. Service providers were trained in clinical and counseling skills, and followed-up as needed. CARE provided support for procurement, distribution, and management of FP commodities and trained local staff on supply chain management. Program staff conducted routine monthly visits to conduct skills' assessments and give follow-up support to healthcare providers. Facility supervision teams assessed general clinic conditions, reviewed and analyzed data displayed on wall charts, and discussed potential actions

to improve trends. Radio, participatory theater and songs, and reflective group dialogues about FP were used for community engagement. Displayed in *Figure 1* is the contraceptive method mix in Benin and Ouémé during the 2011-2012 period, and at integrated facilities during the first month of the project and in the month of the study (June 2017).

Figure 1. Contraceptive Method Mix in Benin



Definitions

"Integrated services" refers to the combination of different health services to create new access points for potential clients and improve overall quality of health services and health among clients. Integrated FP services "[provide] recurring opportunities to reach women who may have unmet need for FP with information, counseling, referrals, or even direct services to ensure that women who wish to space or limit pregnancies are able to do so."[6] Included in these visits are discussions of long-acting and reversible methods (LARCs): these contraceptive methods include implants and copper IUDs. HINNOU VIVO Project health facilities provide all three LARC methods in addition to oral contraceptive pills and education regarding the lactational

amenorrhea method (LAM).[3] The latter was an essential element of the project approach, since many women rely on breastfeeding to prevent another pregnancy but are not well informed about the criteria that need to be met for this method in order for it to be effective.

LARCS are beneficial and many women choose them when given the full range of methods because they last for months and years, respectively, and therefore require fewer provider visits and interactions. There exist no adherence issues with LARCs since they work without the active and continued participation of the user. Barriers to access – such as transportation and stigma - are reduced by the need for fewer patient visits. Oral contraceptive pill prescriptions and injectables require quarterly visits to the health facility at most and this may not be feasible for women, especially those with other obligations. Other less effective modern contraceptive methods may include spermicides, condoms (male and female), diaphragms, LAM, and gels. Traditional methods, which may include rhythm or withdrawal, or the fertility awareness method, rely on each couple's knowledge of the correct use of the method and consistency in its use. Some may limit a woman's independence in forcing her to rely on her partner for cooperation; tubal ligation, injectables, implants, oral contraceptives, and IUDs do not require the consent of a partner for use, and in the case of the latter four are hormonal methods rather than physical, and are therefore more discrete contraceptive methods.

[3]Lactational amenorrhea method (LAM): birth control method effective only if the mother's monthly menstruation has not yet returned since childbirth, the infant is at least 75% breastfed, and the infant is less than six months old. *Definition from: https://www.fphandbook.org/chapter-19-lactational-amenorrhea-method.*

Objectives and Aims

Objectives

- The study's primary objective was to explore the experiences of women who attended immunization services in integrated health facilities and to identify factors influencing their decision for use and non-use of modern contraceptives.
- The study's secondary objective was to assess the quality of services the integrated health facilities, as well as efficiency of and fidelity to the integration model.

Aims

- The study aimed to contribute to an understanding of factors enabling and inhibiting the implementation of integrated childhood immunization and FP services, including the accompanying educational sessions, and its effect on the use of modern contraceptives among women who bring their children to the health facility for vaccination.
- Use the results from the study to iteratively adjust the implementation model used in the integrated facilities, as well as contribute to the design of future integration projects.

Study Setting: Postpartum Contraceptive Use in Southeast Benin

Benin is situated on the Gulf of Guinea in West Africa and shares borders with Nigeria, Niger, Burkina Faso, and Togo (see map). The nation is divided into twelve administrative units—departments—with the capital at Porto Novo, although Cotonou is the largest metropolitan area. The dominant religions are Catholicism (33%),

Pulled from *http://www.countryreports.org/country/Benin/map.htm*

Islam (22%), and Voodoo (11%); 55% of women are married, 16% live in union with a man, and the remainder (29%) is single, divorced/separated, or widowed.[7] In the Ouémé Department, 54.7% of women of all ages are without any educational instruction, only 5.5% completed primary school, and 2.2% had completed secondary educations.[89] In direct contrast, only 21.1% of men in the region were without any education, 9.8% completed primary, and 5.3% completed secondary school.[10] 73.3% of women reported working, 1.9% not currently but in the past 12 months, and 24.8% not at all; the survey revealed a positive association between number of children and mothers currently working, possibly in order to support their larger families.[11] The vast majority (71.0%) of the working women reported being involved in "sales and services".[12]

As mentioned, the contraceptive prevalence is low and the fertility rate is high in Benin, and the Ouémé Department does not deviate from these trends. In Ouémé, the overall contraceptive prevalence was 9.2% in 2011-2012, with only 5.0% percent of WRA utilizing a modern FP method; the fertility rate in Ouémé (5.2), was slightly higher than the national rate of 4.9.[13] Many socio-cultural and structural barriers to FP uptake exist, including rumors and misconceptions, the role of men in decision-making, a lack of providers competent in providing FP counseling and LARC insertions, and a lack of awareness among women about their risk of pregnancy.

LITERATURE REVIEW

Criteria for the articles included in this literature review were:

- Publication in the English language;
- Publication in a major journal considered reputable by the author;
- Direct relevance to postpartum contraceptive use, integrated postpartum FP services, and/or integrated postpartum FP and child immunization services.

Postpartum Contraceptive Use

Maternal and child health (MCH) services have been at the forefront of public health programming for the past few decades, but FP services have only recently been identified as carrying some of the highest positive impact of all interventions.[14] While antenatal programs are able to reach a wide audience of pregnant women, they rarely include counseling on contraceptive use after birth. This, combined with many other factors, leaves women in the extended postpartum period without protection against narrowly spaced births and their infants and themselves vulnerable to the adverse outcomes associated with close birthing. The WHO recommends waiting twenty-four months after a live birth or six months after an abortion (spontaneous or induced) to attempt another pregnancy, in order to avoid maternal mortality, fetal death, prematurity, low birth weight, and/or small infant size.[15] In addition to considerations of physical health are those related to the independence of women and the extension of their social, political, and economic participation in communities beyond the role of mothering.

Postpartum FP Services

Starting in the early 2000s, a number of studies began to investigate postpartum services, their use, and the unmet need for FP among women in the extended postpartum period. A study using DHS data from 2010 in seventeen low-and middle-income countries (LMIC), found that in

thirteen of the countries, including Benin, just over half (50.4%) of postpartum women had returned to sexual activity between 3 and 5.9 months. More than three quarters of the women 9-11.9 months postpartum had returned to sexual activity, and most women waited for the return of menses to begin before starting a contraceptive method and resuming sexual activity.[16] Since women are able to become pregnant before the return of menses, and are especially vulnerable if they are not exclusively breastfeeding and/or over six months postpartum, this study demonstrates the need for programs that target postpartum women before they return to sexual activity after a birth (or spontaneous or induced abortion).

Several strategies have been used in the past few years to try to increase the use of contraception among postpartum women. In 2006 and 2007, in the Sylhet District in Bangladesh, researchers sought to understand the impact of the use of a leaflet and narrative story on an increase in postpartum contraceptive use. The design of the study involved the creation of visual and narrative leaflets for health facilities involved in the Health Fertility Study in the country. The leaflet contained the story of Asma, a woman who had just given birth, believed that she was infertile until menstruation returned, became pregnant, and then learned about the use of contraception before menstruation to prevent close birth spacing. These leaflets were used during counseling sessions with postpartum women and in group meetings with mothers-in-law, husbands, and mothers. Husbands, mothers, and mothers-in-law of the chosen forty postpartum women were then asked to participate in focus group discussions; of these thirty-five of the mothers and mothers-in-law and 34 of the husbands followed through; all forty postpartum women were interviewed. The results pointed to a recommendation that there be more involvement of spouses during community sessions and the need for alternative strategies (other than just mentioning it during counseling) to reinforce information about LAM and the

importance of starting a contraceptive method soon after childbirth. In addition, the researchers reported that the story of the fictional postpartum woman, Asma, was effective in teaching women about the return of fertility after birth.[17] The study indicates the need for effective tools to help women understand their fertility cycles and the inclusion of family in the decision-making process and community engagement aspects of FP programs and projects.

Another study looked at how to increase the use of LAM in Jordan to space births, and in the process, discovered an association between the promotion of LAM and the uptake of modern contraceptive methods in the extended postpartum period. The intervention in this study was simple: in 1996, at forty-five health facilities, the Ministry of Health included LAM in the contraceptive method mix offered to postpartum women during counseling sessions, after training health providers on LAM and breastfeeding support. In 1998 to 2003, surveys were carried out among 3,183 women with children between thirteen and 24 months at eleven child health centers involved in the intervention. The results were unambiguous: researchers found a positive association between the knowledge of the six-month LAM criteria and postpartum women using the method correctly and starting another FP method before or at six months after childbirth. The researchers concluded that knowledge of LAM may increase the use of modern contraceptive methods among postpartum women who did not use them in the 24 months before their last pregnancy, that the promotion of LAM results in better breastfeeding practices, and that this same promotion will better infant health and lead to longer amenorrhea following childbirth.[18] The study emphasizes the need for training of providers in LAM and other FP methods and the promotion of method use during the postpartum period.

Community-based behavior change models have been used to understand how to increase postpartum contraceptive uptake. In 2012, community health workers in rural India carried out

an educational campaign to teach women under 25 with one child, no children, or 4-7 months pregnant, and their oldest female family member about the healthy timing and spacing of pregnancy, LAM and contraception, and postpartum health care. The researchers used participant feedback to ensure that messages were appropriate for women that were semi-literate and that the messages were clear and culturally acceptable. In addition to materials for women, the behavior change intervention emphasized the use of materials to educate husbands and males in the community about maternity care and postpartum contraception. The study of this project was randomized and involved the use of a pre- and post-test design and involved 1,197 and 959 women, respectively. The results revealed a significant increase in counseling on all topics in the intervention group, as well as higher contraceptive knowledge for women in this group. More women in the intervention arm were using modern contraceptive methods when they were followed-up with nine months after FP counseling. The researchers in this study remarked that the intervention was simple and easy to implement and that although counseling on all contraceptive methods increased in the intervention arm, it is important to have quality supervision of the community health workers' counseling sessions in order to create continuity and sustainability of the intervention.[19]

The postpartum FP studies mentioned here all provide essential knowledge regarding the use and non-use of contraceptive methods by women within twelve months after having a child. Women are in need of FP services soon after they give birth, as the vast majority return to sexual activity within six months postpartum, and are at risk of becoming pregnant again soon after giving birth. Men should be involved throughout the spectrum of MCH and FP services, as they are an integral part of a couple's decision-making regarding FP. LAM counseling increases its

correct use as well as the uptake of modern contraceptives following childbirth. And supervision is important to creating sustainable and successful postpartum FP programs.

Integrated FP Services

Before the implementation of integrated service programs and projects, a handful of studies sought to determine the nature of the association between ante- and postnatal service use and the use of modern contraceptives. One, from Kenya and Zambia, used DHS data from 2007-2009 to look at women who had a live birth within five years before the survey and used a model to find associations between intensity of antenatal and postnatal care and modern contraceptive use among postpartum women. The resulting model showed a strong association between intensity of service use and postpartum contraceptive use in both countries, primarily due to the use of antenatal services. The authors recommended that pregnant women be introduced to FP as early as possible in the MCH cascade of services in order to increase their exposure to and later likelihood of adoption of a modern contraceptive method.[20] The positive results from studies looking at associations between the services prompted varying models to integrate the two services for maximum increase in their use. This integration has taken many forms, with the hopes that new access points to postpartum FP will cause more women to uptake contraceptive methods. The five main methods are as follows:

- Service coordination, wherein clients receive multiple services delivered by multiple providers at the same site during a single visit;
- Referrals, wherein staff members providing one type of service encourage their clients to receive other services from different providers while at the health facility;
- Community partnerships, wherein health facility staff refer clients to trained community health workers to obtain other services, or the other way around;

- Cross-trainings, wherein health care providers are trained in more than one type of specialized care so that they are able to provide more than one service to clients during a single health facility visit;
- And structural changes, which attempt to alter health facility infrastructure and administration in order to make them run together more smoothly and facilitate referrals.[21]

These integrated interventions work to strengthen health care infrastructure in order to make services easier to navigate for postpartum women.

Sixty-one studies addressing integrated postpartum and MCH services were reviewed with mixed, but generally positive results. The studies included randomized and controlled studies, as well as qualitative and quantitative studies in order to understand more about client and provider experiences with integrated services. They spanned many countries and included, Nigeria, Afghanistan, Egypt, and South Africa. One of the larger literature reviews, which included nine studies published in English between 1994 and 2009 and looked at all five of the types of integration listed above found that no studies reported a negative impact on health services when integrated with postpartum FP. Seven of the associations were clearly positive, while two were neutral. Among providers, clients, and community members interviewed, all were happy with the integration process and new methods of service delivery.[22] A second literature review of integrated primary health services with FP in LMIC, published in 2011, came to an opposing conclusion. In this review, the investigators reviewed five randomized and four controlled trials: five of the included studies added a linked service to existing services and four compared integrated services to single, specialized services. The researchers for this article found that linked components increased service utilization, but not health status outcomes and they

reached no conclusions regarding integrated services compared to single services. They did, however, note that FP services added on to primary care increased FP use, but did not change incidence of pregnancy. In addition, the integration of MCH and FP was found to decrease FP knowledge, and led to little difference in contraceptive use.[23]

The investigators for one article sought to learn more about what had already been learned about postpartum FP service integration and in which areas more research should be done. To do this, they looked at pre- and post-natal counseling in thirty-five interventions across five continents (excepting Australia and Antarctica). The results were clear and many: short counseling sessions that were either pre- or post-natal did not increase contraceptive uptake. However, a combination of pre- and post-natal counseling increased contraceptive uptake in all of the projects reviewed for the paper. The researchers observed that immediate contraceptive uptake is rare, and therefore it is immensely important that women be exposed to FP counseling early on and that the providers distributing FP products and services be the same as those providing MCH services, so there is trust between the women and providers at a given facility. Their last point of emphasis was in regards to LAM: the researchers strongly recommended pre-discharge FP counseling that instructs mothers that LAM is only effective for a few months encourages postpartum clinic visits to obtain other contraceptive methods.[24]

An assessment of the integration of FP and MCH services in Kano, Nigeria looked at community-level changes, including Community Core Groups and Community Mobilization Teams that represented communities in the health facility catchment areas. These committee members were trained to provide basic FP messages to pregnant women through their first week after birth. The researchers also assessed providers trained in Emergency Obstetric and Neonatal Care (EmONC), postpartum FP, implant and IUD counseling, insertion and removal, and

kangaroo mother care. While taking pains to make the integration move as smoothly as possible and avoid any community conflict, the researchers called FP "birth spacing". Researchers found that antenatal care was the most highly valued service by both providers and clients and noted that it could be used as an entry point to other services. Clients also revealed a belief that antenatal care had protective effects against adverse outcomes possible from pregnancy, delivery, and in the postpartum period. The study investigators identified cost and transportation as barriers, as well as the controversial nature of postpartum contraception, but noted that integrated services make it more accessible and clients can uptake contraceptives in a clandestine fashion while getting other services, especially if the services are provided on the same day.[25]

An Afghani project took a different approach and integrated FP and postpartum care in five delivery hospitals in Kabul, which, combined, delivered about 47,000 infants annually at the time of the study. The objective of this study was to understand the integration process from the point of quality improvement. With the integrated services, the investigators were able to see an increase in several services over an eleven-month period: number of counseling sessions with postpartum women (36 to 55%), number of counseling sessions with husbands (18 to 90%). In addition, at eighteen months, the percentage of postpartum women who received contraceptive methods when leaving the hospital, after counseling, increased from 12 to 95%, with most choosing LAM or condoms. The researchers were able to identify barriers to integration along the way; these included: a lack of private space for counseling in the postpartum ward, the inability of some postpartum women to make FP decisions without input from their husbands or mothers-in-law, the limited FP skills of nurses and midwives at the hospitals, and stock management issues at the facilities.[26]

A final study looked at the scale-up process for effective integrated services in Upper Egypt. In this intervention, birth spacing messages were updated and revised for pregnant and postpartum women, FP and MCH managers and supervisors were trained to then train their employees on FP on the job, providers were given job aids, monitoring and supervision was conducted my ministry of health and primary care staff, seminars were held for husbands, and national orientations to the integrated service delivery system were held. All female clients that were low parity and pregnant or postpartum were given birth spacing and FP messages while at antenatal and postpartum care services. Husbands and community leaders were targeted in the community to raise awareness of the need for postpartum FP. Many inhibitors and catalysts were identified for the integration process: barriers included opposition by officials that believed integrated FP services would disrupt MCH services and high turnover of employees. Catalysts included having a simple intervention package, staying within the bounds of Ministry of Health policies, limiting postpartum visits so as not to overburden staff, the training of providers, restricting incentives to providers, and integrating the curriculum for integrated services nationally. The researchers involved in the project recommended ownership by stakeholders, partnerships with local organizations, adaptation to emergent community needs, and a heavy investment of time and technical support.[27]

Recommendations for Integrated Child Immunization and FP Services

Childhood immunization services have recently been identified as providing a stable platform upon which FP services can be delivered. Various working groups, such as the Family Planning High Impact Practices working group (HIP)[28] and K4Health have reviewed all of the evidence thus far, and recognized family planning and immunization integration as a high impact practice, leading to the development of open source tools. HIP's brief on integrated service provision

promotes the use of "deliberate" integration using explicit linkages in programs, and integration of routine immunization sessions rather than campaigns.[29] The brief further states that integrated services are important because: they have broad reach, infant immunization require "multiple and timely" contacts in the postpartum period, evidence suggests integration is acceptable to providers and clients, and increasing access to postpartum FP helps to increase the likelihood that children will reach their adolescent health goals. After review of the evidence to date, HIP recommendations include:

- Monitoring both services to measure possible positive and negative effects on service delivery and health outcomes
- Implementing systematic screening to assess clients' needs for family planning
- Using "dedicated" family planning providers to increase use of family planning methods and increase LARC uptake
- Using "functioning" health systems to support integrated service delivery
- Engaging political and community actors to build a supportive environment
- Keeping messages simple to maximize comprehension
- Ensuring clear and effective referrals[30]

In addition to these recommendations, the HIP brief provides a list of elements that facilitate and inhibit successful integration. Facilitators include:

- "Adequate provider training and supervision
- Policies that support integration
- Adequate immunization and family planning commodities available, including a range of contraceptive options and free or subsidized services
- A robust health information system that collects information on both services

- Strategically designed, field-tested communication materials and job aids"[31]

Inhibitors include:

- "Weak referral systems and follow-up
- Lack of supportive supervision
- Unsustainable workloads for providers
- Staff turnover and shortages
- Inadequate provider knowledge or skills
- Commodity stock-outs
- Lack of collaboration between vertical programs or funders"[32]

Each of these elements and their benefits or repercussions was echoed in the following toolkits.

The Health Information & Publications Network (HIPNet.org) and Knowledge for Health (K4health.org) have published and continually update "The Family Planning and Immunization Toolkit"[33] and "Integrating Family Planning and Maternal, Newborn, and Child Health Services"[34], respectively. These guides are open to the public and encourage the deliberate integration of family planning and infant immunization to strengthen both systems. The HIPNet toolkit includes information on evidence supporting or negating the impact of integrated services, advocacy documents, M&E, service delivery implementation, and social and behavior change communication recommendations, as well as examples of country experiences. K4Health offers an overview of the integrated services practice, courses, tools, evidence review, advocacy documents, and ways to share the information with others.

Integrated Child Immunization and FP Services

Although there are many publications that have found or not found positive effects of the integration of child immunization and FP services, consensus is that more should be done to

investigate the impact of integrated service provision. The studies reviewed were all undertaken in LMIC countries, concentrated in West Africa and India. Four of the studies integrated FP messages and same day referrals to co-located services into immunization services, while three other studies used postpartum screening and individually targeted messages to refer women to FP services. One included article was published in 1994, the others between the years of 2010 and 2015. Two of the studies reported little or no change with integration, but five cited positive changes following integration.

The studies that showed negative results of integrated FP and immunization services were undertaken in Ghana, Zambia, and India. A cluster-randomized trial in Ghana and Zambia, where FP messages and referrals were integrated into existing immunization services found that there was no significant effect on non-condom FP uptake, counseling did not improve postpartum women's ability to determine the return of fecundity, and an incomplete implementation of the intervention as assessed by healthcare providers. The authors recommended changing individual counseling sessions to group sessions (a change undertaken by the healthcare providers in the middle of the study period), to train all providers involved, and to make sure that the integrated services were implemented consistently across all health centers.[35] One of the other studies with negative findings evaluated a program in Jharkhand, India, which included FP counseling, referrals, home visits, and community health worker (CHW) recruitment of postpartum women for FP services; a cross-sectional descriptive study involved two primary health centers on health and nutrition days and semi-structured interviews with service providers, managers, and postpartum women.[36] Due to inconsistent training, providers were unable to remember all criteria for LAM, postpartum women reported much less counseling than providers did (less than 5%), service delivery locations were crowded and did

not have space for private counseling, most locations did not have basic supplies or complete records, and most women were counseled in groups and only offered condoms, oral contraception, or sterilization.[37] The article authors noted that due to service delivery challenges and stakeholder issues, integration was difficult and that in order to overcome the difficulties, standardized operating procedures, integration of FP training into provider training, and the development of communication materials for providers and clients.[38]

Other studies found integration successful in improving both FP and immunization service uptake. Studies of integrated FP and immunization services in Rwanda, Nigeria, Liberia, Senegal, and Togo found positive results and evidence to support the integration of both services. In Rwanda, a program that added FP messages and referrals to immunization services used a cluster-randomized design at fourteen health facilities. The investigators found an 8% increase in contraceptive use in the intervention groups compared to decreases in the control groups and no adverse effects on immunization services. Fear of side effects and waiting for the return of menses were among the reasons women cited for not starting a contraceptive method.[39] Another study in Liberia looked at a similar targeted message and referral system in ten government facilities chosen for high immunization rates and low FP prevalence. Results showed an acceptance range from 10-45% monthly. In this setting, over 80% of women accepted a referral for the same day, and of these, 90% chose an FP method on the same day. The total number of FP users increased by 73% and 90% in the two study districts, women referred from immunization accounted for 44% and 34% of all new FP users, and DTP3 rates stayed the same or increased.[40]

Other studies included postpartum screening and referral, targeted individual messages, and cross-sectional data collection. A screening and referral process that was integrated into

Nigerian health facilities included pre- and post-observations of provider interactions, provider and client interviews, and service statistics. Results showed that providers were more likely to see clients in private, treat them with respect, ask open-ended questions, respond to questions and concerns, use appropriate information and education, and maintain confidentiality after training. Clients also felt they were better equipped to make a decision, satisfied with the services they received, and comfortable with providers. Barriers cited included the need for spousal permission to start using an FP method, lack of knowledge about FP, and lack of interest in FP services.[41] Targeted messages (that included an FP message and referral to the facility) given individually to women during routine immunization services at sixteen health facilities in Togo found a LAM knowledge increase of 18%, a 54% increase in new FP clients, no difference in method mix, and increased immunization services among intervention facilities and no changes in control facilities.[42] A final cross-sectional study looked at women's exposure to FP information and services at the time of delivery and at child immunization services and use of contraception. Data were collected from 9,614 women and results showed that FP use was highest among immunization service recipients and that women reported that they would have accepted a contraceptive method if they were offered one at the time of other services.[43]

Recommendations from the studies include the necessity of a stable healthcare workforce and to consider provider attrition, create systems for supervision and ongoing training for providers, ensure targeted messages are context appropriate,[44] consider the importance of privacy and individual communication, and work to reduce barriers caused by stigma and rumors surrounding the use of postpartum FP methods.[45] A table containing salient elements from each article examined can be found in *Appendix A*.

MANUSCRIPT

Key Message

Integrated routine childhood immunization and family planning services are feasible and accepted by postpartum women, but need consistent implementation, spousal engagement in decision-making, and context-specific adaptation to effectively reduce missed opportunities and increase uptake of both services.

Abstract

Objective: The integration of routine childhood immunization and family planning (FP) services (FP/EPI) seeks to provide pathways for increased uptake of both services. This evaluation assessed the implementation of a combined service provision model and experiences of postpartum women seeking services at integrated FP/EPI facilities in Benin.

Methods: We conducted nine focus groups with FP users and non-users in the extended postpartum period. Women were recruited using nurse midwives at seven FP/EPI integrated facilities. We observed FP/EPI sessions at eight representative facilities. We coded focus group discussion data and analyzed them for themes using MAXQDA 12. We analyzed observation data using Microsoft Word and Microsoft Excel.

Results: The focus group participants had a median age of 28 years and three children. Most cited withdrawal as a previous FP method, and those currently using a method cited the Jadelle implant most often. Women in both groups shared generally positive experiences with FP sensitization, but felt that the referral process was confusing. Reasons to start a contraceptive method included: to stop worrying about an unplanned pregnancy, to space births, and to recover from a previous birth. Common reasons to not start a contraceptive included: not receiving a husband's consent, husband not being present at the time the method was offered, and possible

contraceptive side effects. Observations revealed that in four out of eight health facilities, FP sensitization did not take place due to staffing shortages. Very few health educators used job aids or referral cards and educational materials were not displayed throughout the health facilities. **Conclusions:** Integrated FP/EPI services are feasible and accepted by postpartum women, but require uniform implementation across health facilities, including adequate staff, adapted referral systems, consistent and continuous training for health workers, and engagement activities targeting men in the community.

Main Body

Introduction

There are 1.6 billion women in the developing world that are of reproductive age (15-49) and only 671 of them are users of modern family planning (FP) methods.[46] High unmet need for FP and low contraceptive prevalence are associated with adverse health outcomes for women and children: among women with birth-related complications, only 35% receive appropriate care for themselves or their infant.[47] An estimated 308,000 women die from pregnancy-related causes.[48] Women not using contraceptive methods are at risk of closely spaced pregnancies, which may threaten their lives. The World Health Organization (WHO) recommends waiting twenty-four months after a live birth or six months after an abortion (spontaneous or induced) to attempt another pregnancy, in order to reduce the risk of maternal mortality, fetal death, prematurity, low birth weight, and small infant size.[49] Postpartum women are especially vulnerable: a review of Demographic and Health Survey (DHS) data from 17 countries showed that in 14 of the countries women 9-12 months postpartum were less likely than married women in the same population to be using FP methods.[50] In addition to considerations of physical health are those

related to the autonomy of women and the extension of their social, political, and economic participation in communities beyond the role of mothering.

Integrated health services, which involve either co-located services with a referral offered for the same day or one service plus a referral to another service at a different location, are an innovative way to reach underserved populations that may face barriers in accessing adequate health care. In particular, integrated FP/EPI services have the potential to reduce adverse maternal and child health outcomes, while offering opportunities for empowered decision making among women. Integrated FP/EPI services are often based on routine immunization platforms in contexts where immunization rates are high. One frequently used indicator to measure immunization performance is coverage of DTP3, the third diphtheria-tetanus-pertussis immunization that an infant receives in its first year of life. High adherence to immunization schedules provides an entry point for postpartum women to access reproductive health services.

Little research has been done on integrated FP/EPI services. The research that has been conducted revealed mixed results. A cluster-randomized trial in Ghana and Zambia, where FP messages and referrals were integrated into existing immunization services found that there was an incomplete implementation of the intervention as assessed by healthcare providers and recommended training all providers involved, and ensuring that the integrated services were implemented consistently across all health centers.[51] A program evaluation in Jharkhand, India found that due to inconsistent training, providers were unable to remember all criteria for LAM, postpartum women reported much less counseling than providers did (less than 5%), service delivery locations were crowded and did not have space for private counseling, most locations did not have basic supplies or complete records, and most women were counseled in groups and only offered condoms, oral contraception, or sterilization.[52] The article authors noted that due to

service delivery challenges and stakeholder issues, integration was difficult and that in order to overcome the difficulties, standardized operating procedures, integration of FP training into provider training, and the development of communication materials for providers and clients were needed.[53]

Studies of integrated FP/EPI services in Rwanda, Nigeria, Liberia, Senegal, and Togo found positive results and evidence to support the integration of both services. In Rwanda, a program evaluation found an 8% increase in contraceptive use in intervention groups compared to decreases in the control groups and no adverse effects on immunization services. Fear of side effects and waiting for the return of menses were among the reasons women cited for not starting a contraceptive method.[54] Another study in Liberia looked at a similar targeted message and referral system in ten government facilities chosen for high immunization rates and low FP prevalence. Results showed an acceptance range from 10-45% monthly. In this setting, over 80% of women accepted a referral for the same day, and of these, 90% chose an FP method on the same day.[55]

Other studies included postpartum screening and referral, targeted individual messages, and cross-sectional data collection. Results from a Nigerian study showed that providers were more likely to see clients in private, treat them with respect, ask open-ended questions, respond to questions and concerns, use appropriate information and education, and maintain confidentiality after training. Clients also felt they were better equipped to make a decision, satisfied with the services they received, and comfortable with providers. Barriers cited included the need for spousal permission to start using an FP method, lack of knowledge about FP, and lack of interest in FP services.[56] Targeted messages (that included an FP message and referral to the facility) given individually to women during routine immunization services at sixteen health

facilities in Togo found a LAM knowledge increase of 18%, a 54% increase in new FP clients, no difference in method mix, and increased immunization services among intervention facilities and no changes in control facilities.[57] A final cross-sectional study looked at women's exposure to FP information and services at the time of delivery and at child immunization services and use of contraception. Data were collected from 9,614 women and results showed that FP use was highest among immunization service recipients and that women reported that they would have accepted a contraceptive method if they were offered one at the time of other services.[58]

Recommendations from these projects informed the Family Planning High Impact Practices (HIP) brief on FP/immunization integration (displayed in *Table 1*) and toolkits for integrated FP and immunization service delivery by K4Health.[59]

Table 1. HIP-identified Factors Influencing Success of Integrated Programs[60]

Factors that facilitate successful integration: • Adequate provider training and supervision • Policies that support integration • Adequate immunization and FP commodities available, including a range of contraceptive options and free or subsidized services • A robust health information system that collects information on both services • Strategically designed, field-tested communication materials and job aids • Integration is offered during routine immunization visits, rather than campaigns, which are not recommended
Factors that inhibit successful integration: • Weak referral systems and follow-up • Lack of supportive supervision • Unsustainable workloads for providers • Staff turnover and shortages • Inadequate provider knowledge or skills • Commodity stock-outs • Lack of collaboration between vertical programs or funders

Study Setting

The country of Benin is situated on the Gulf of Guinea in West Africa and shares borders with Nigeria, Niger, Burkina Faso, and Togo. The nation is divided into twelve administrative units,

called departments, with the capital at Porto Novo, although Cotonou is the largest metropolitan area (see *Figure 1*). In Benin, the need for FP services is high. The last DHS reported that 47% of women of reproductive age (women between the ages of 15 and 49)[61] wish to avoid a pregnancy in the next two years, and of these, 33% are not currently using a contraceptive method. An estimated 19% of births between 2007 and 2012 were unplanned.[62] Overall, contraceptive prevalence is low at 12.9%, with use of modern FP methods (tubal ligation, oral contraceptives, IUDs, injectables, implants, male/female condoms, lactational amenorrhea method [LAM])[63] at just 7.9%.[64] DTP3 coverage in Benin is estimated to be at 88.3%.[65]

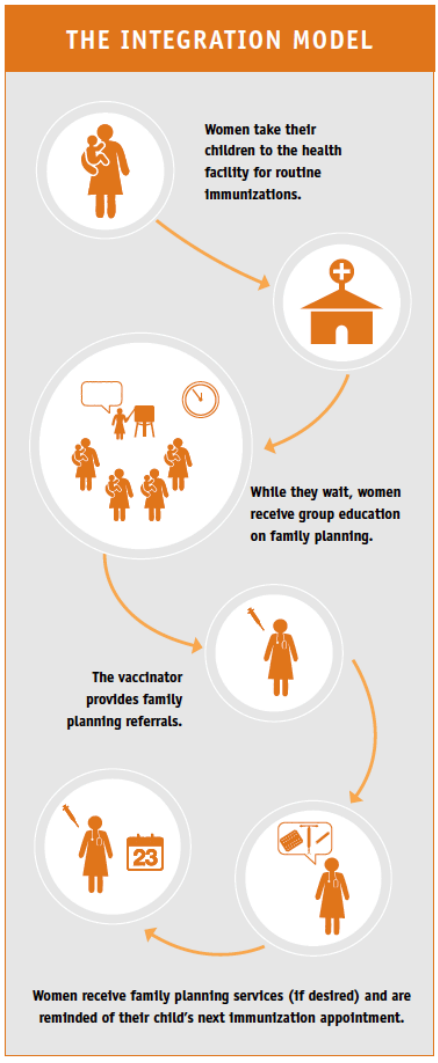
Figure 1. Administrative Map of Haiti[66] *with General Study Area Circled (Ouémé Department)*

Program Description

In 2016, the humanitarian organization CARE implemented the HIN NOU VIVO! (meaning "Wellbeing of the Family" in a local language) Project, which addresses gaps in the provision of contraceptive use — with special emphasis on postpartum contraception —through the deliberate integration of FP and routine childhood immunization services. Integration was implemented in

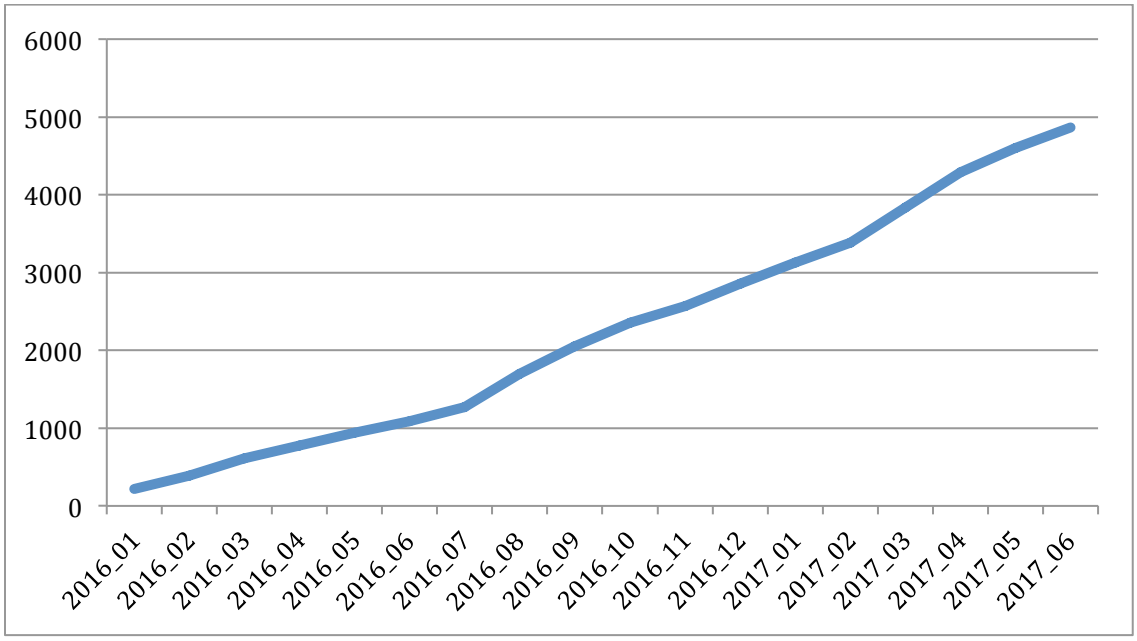
20 (of 40) Ministry of Health facilities, serving 128,662 people living within the Adjohoun, Bonou, and Dangbo health zones in the Ouémé Department of southeast Benin. When mothers arrived at a health facility with their children for immunization, community health workers gave brief targeted messages about the benefits and availability of FP services at group education sessions before immunization. After these sessions, the women were offered referral cards for individual counseling with nurse midwives, where, according to the implementation model, they were able to receive their method of choice on the same day and at the same health facility. A diagram of the integration model used may be found in *Figure 2.*

Figure 2. CARE's HIN NOU VIVO! Integrated FP/EPI Services Model[67]



CARE provided job aids to each health facility for use by FP sensitization facilitators and FP counselors, to help them in displaying and describing each contraceptive method, and assist them in counseling women on which methods would best fit her needs. The HIN NOU VIVO! Project was implemented with five main components: provision of competency-based clinical training with follow-up assessment and training, provision of a continuous supply of contraceptives and medical supplies, data-driven facility supervision on a regular basis in partnership with local government health officials, engagement and mobilization of communities, and the deliberate integration of the two services. Service providers were trained in clinical and counseling skills, and followed-up as needed. The project supports the provision of a range of contraceptive methods, including implants, copper IUDs, injectables, oral contraceptives, and education regarding the correct use of LAM for contraception. CARE provided support for procurement, distribution, and management of FP commodities and trained local staff on supply chain management. Program staff conducted routine monthly visits to conduct skills' assessments and give follow-up support to healthcare providers. Facility supervision teams assessed general clinic conditions, reviewed and analyzed data displayed on wall charts, and discussed potential actions to improve trends. Radio, participatory theater and songs, and reflective group dialogues about FP were used for community engagement. Health facility staff agreed upon one day each week to host an integrated FP and infant immunization session. *Figure 3* displays the cumulative number of new FP users each month starting with the first month of Phase I of the project, January 2016, and ending with the month of the evaluation, June 2017.

Figure 3. Cumulative Monthly New Family Planning, January 2016 – June 2017



Study Objectives

The primary objective of this evaluation was to evaluate the implementation the integration model. The secondary objectives were 1) to explore the experiences of women in the extended postpartum period that attended integrated FP/EPI services and 2) to identify major factors influencing their use and non-use of modern FP methods and how those may relate to program activities. The findings from the evaluation contributed to an understanding of factors enabling and inhibiting the implementation of integrated FP/EPI services in the context of health systems strengthening. The results from the evaluation were used to modify CARE's service delivery methodology, and iteratively adjust the implementation model used in the integrated facilities, and contribute to the general body of knowledge on this topic.

Methods

Study Context and Design

We chose this mixed qualitative methods design because we hoped to understand the experiences of women in the extended postpartum period that attended integrated FP/EPI services. In addition, we sought to learn more about the integration process and how it differed from the original implementation model. We conducted this study at eight of the 20 health facilities providing integrated FP/EPI services in Ouémé Department, Benin. Collaborators included CARE USA, CARE International Benin-Togo, and administrators at each of the health facilities. One lead investigator and two clinical assistants collected the data at the study health facilities with integrated services over a two-week period in June 2017. The lead investigator was trained on qualitative research methods and trained the clinical assistants on them as well for use in the evaluation. We made minor iterative revisions to the focus group discussion tool and patient flow analysis form throughout the data collection process.

Focus Group Discussions

We chose group discussions to facilitate dialogue among participants in order to access more information about community values and beliefs. Nurse midwives from study locations recruited 78 women who had participated in at least one FP sensitization session while waiting for immunization services for their children. Two sets of focus groups included users and non-users of modern FP. All participants in the focus groups had been exposed to FP sensitization during an immunization visit. FP users received their contraceptive methods at the integrated health facilities, but not necessarily as the result of a referral from immunization. We excluded any women that did not receive their method at the project health facilities and that were not in the postpartum period due to our research questions and interest in learning more about integrated service provision. We conducted the focus groups at a purposively selected group of health facilities in order to ensure diversity in contraceptive method mix and age among participants, as

well as a range of health facility size and accessibility to participants.

Two clinical assistants, responsible for monthly data collection and supportive supervision, were trained on the facilitation of focus group discussions and qualitative data collection. Though focus group discussion guides were formulated in French, the dominant language in Benin, they were conducted nine discussions in three local languages: Fon, Wéme, and Goun. This was to ensure that women from all educational backgrounds could participate using their mother tongue. Focus groups were conducted in a private room, so participants could share their thoughts without fear of privacy breaches. Focus group guides contained questions related to the physical process of integrated service delivery, women's decision-making processes around FP, and community attitudes towards FP.

We conducted focus group discussions after integrated immunization sessions, so participants would not have to return to the health facility in order to participate. When they arrived at the immunization session, they were pulled aside by a nurse midwife and asked if they would be willing to participate in a focus group about the health services that they receive. After the immunization session, the women were escorted to a private room. Once there, the clinical assistant verified that they were willing to participate in the focus group and collected basic demographic data (age, number of children [their age and gender], past FP methods, current FP methods). The clinical assistant then asked if they consented to the discussion being recorded. At the end, participants were thanked for their time.

Throughout the data collection process, the clinical assistants transcribed the focus groups into French. After transcription, all recordings were destroyed. The lead investigator reviewed the transcriptions as they were received, in order to determine saturation. We determined saturation when we heard repetition of the same themes across focus group

discussions and felt that each question and theme had been fully explored. Data were then entered into MAXQDA 12.[68] We analyzed the data using the Grounded Theory Approach, by allowing codes to emerge through the data that we had collected through constant comparison between focus group discussion transcriptions.[69] We created categories and subcategories through the coding that led to themes embedded in the data. We used these themes to understand the experiences of postpartum women attending integrated services at HIN NOU VIVO! Project health facilities.

Patient Flow Analyses

We conducted patient flow analyses to learn more about the integrated services and the movement of women through them, and how this compared to the original implementation model for the HIN NOU VIVO! Project. These evaluations were done on integrated services days at a purposively selected sample of eight of the twenty integrated health facilities. Due to the qualitative nature of the study, sampling aimed to be representative of all health facilities supported by the integration project. We chose four facilities in the Dangbo health zone, three facilities in the Adjohoun health zone, and one facility in the Bonou health zone to include a range of service providers at each facility, mix of FP users and non-users, and geographic accessibility by clients. We visited the health facilities on the weekday designated as the integrated FP/EPI services day.

The patient flow analysis form was originally based on the one presented in a Dixon, et al. paper that used this method in low resource settings.[70] However, we decided that instead of creating individual cards for each client to carry throughout their visit to the health facility, it would be more practical to merge the patient flow component with observations. Therefore, we used a custom-made form with room for aggregate data collection (for all women attending the

integrated FP/EPI session). The form used to record information included time of first patient arrival, time of immunization session start, time of FP session start, number of women in attendance, movement of women from immunization to FP services, and time when the last woman referred from immunization received services. Notes relevant to the integration model were included, such as information about the sensitization session, the type of provider conducting the sensitization session, and the availability of providers at the health facility.

The lead investigator and clinical assistant arrived at the health facility early in the morning in order to be able to record when the first mother arrived with her infant for the integrated FP/EPI services. Throughout the day, the investigator and clinical assistant stayed within hearing distance of the immunization room, in order to observe and take notes on the proceedings. At the end of each day, the notes were digitized: time values were aggregated and analyzed in Microsoft Excel[71] and observation notes were grouped in Microsoft Word[72]. Analyses looked at the time between each step of the patient flow and how implementation at each health facility compared to the original HIN NOU VIVO! Project implementation plan.

Results

Results of Focus Group Discussions

The majority of women that participated in the focus groups felt that they were well received by staff, that staff were friendly and nonjudgmental, and that they received the services they needed at the nearest health facility.

> "All is well in our health center. When we come, the health workers take care of us. For vaccination we pay nothing."
>
> "When I come to the health center I am well received and satisfied with the care I need, whether it is a prenatal consultation or for any other illness. Besides, I do not live far

from here. I have no difficulty in going to a clinic closer to my home, but I always come here."

The participants said that during the FP educational sessions they learned that contraceptive methods prevent close pregnancies, allowing them to recover after pregnancy and improving their infants' opportunities for healthy growth.

"We are told that even if we want to have 20 children, FP will help us space them for the happiness of the family."

The participants reported learning about various modern methods, and hearing detailed information on those that they were most interested in during question and answer sessions at the end of the sensitization session.

"If we adopt a method of family planning, our children will grow well, we can breathe and give ourselves time to carry out our income generating activities, and if necessary, make other children at the right time. The family planning does not prevent you from making other children, because if you have a method and decide that you want a child, you can always approach the health agents and they will remove it so you can have another child."

Both FP users and non-users stated that they found the referral process confusing. Most FP non-users believed that if they took a referral card and met with a nurse midwife they would need to choose a method that same day, which made them reluctant to accept a referral.

"Some women believe that when you take the card, it is to go to adopt [a method] at the same time… [They do not go] because they are scared."

They reported being told to make an appointment and return later for a method, but could not predict their schedules in order to make an appointment.

Other reasons to not start a method included: husband not giving consent to use FP, husband not being present at the time FP was offered, the woman waiting for her husband to suggest that she start a method, and fear of possible side effects. Women in both FP user and non-user groups discussed topics such as "menstruation [coming] every two weeks instead of a month," "ectopic pregnancies", and that "after FO, no more children because it makes you sterile". Women in the FP non-user group were especially wary of making decisions without their husbands.

> "If by chance, you alone take on the responsibility to adopt a method without the approval of your husband and you get sick, you will have ignored him because you did not keep him informed, and he will not take care of you. It is not he who sent you to do it."

With reference to male engagement, one woman made a suggestion:

> "I would like to return to the situation of the lady whose husband is very reluctant and ask if you can give her advice and teach her how to approach her husband, because we young ladies do not always have the experience to approach our husbands, and as you are older, you can help us."

Women that did uptake FP methods reported receiving information on a range of methods and their possible benefits and side effects.

> "The midwife introduced me to different methods. For each of them, she gave me their name, their [mode of] action, and how long they lasted. When she presented me the injectable, I told her that it does not suit me and she presented me the Jadelle, the IUD, and gave me all the information. I had all the explanations and am satisfied with the midwife."

Reasons to start a method included: to stop worrying about an unplanned pregnancy, to recover after a previous birth, to space births, to be able to decide when to become pregnant next, to live in harmony with a spouse, and because women felt that they cannot deny their husbands sex for fear of pregnancy.

> "Our mothers in the old days did not have the information on family planning and had children close together and did not have peace; it's not to fall into the same situation that I decided to adopt a family planning method."

Focus group participants were also asked about community beliefs around FP and what advice they would give a friend considering a FP method. Women in both groups said they would tell a friend: to reflect and then do what is best for her, talk to her husband, or that they are not a qualified counselor. Women in the FP method group also said that they would tell a friend that starting a method is a good idea that they made for themselves.

> "I will encourage her to do it; starting with my apprentices I raise awareness to get them to adopt a family planning method because they are young girls who have friends and without any method can get pregnant and mortgage their future. I think that anyone who wants a planning method and wants my advice will always be encouraged."

All groups reported that some community members believe that women on FP want to space their births and allow their children to get older before having more children, but others believe that women using a FP method are "prostitutes who want to abandon their husbands" or will become sex workers, want to commit adultery, or do not want more children.

Results of Patient Flow Analyses

We observed a lack of motivation and competing priorities among staff, as well as the presence of inadequate and untrained staff. Only four of the eight integrated facilities had FP sensitization

during the immunization sessions; at each facility, a different type of staff member presented the FP information (midwife, nurse, vaccinator, and vaccination coordinator). We observed some small factual inaccuracies in the transmission of the information of FP. The clinical assistants, who hold a supervisory role in the project and who participated in the observations, interjected at each of the observed FP sensitization sessions to correct the health workers on various subjects, such as contraceptive method duration and LAM criteria. The content and order of information conveyed in FP sensitization sessions varied between the health facilities. Only one educator used a job aid and only two educators distributed referral cards to FP services.

All women attending the FP sensitization sessions seemed confused about the purpose of the referral cards that they were given. We observed that they brought the referral cards to the FP provider, but then left the facility, without receiving FP counseling or arranging counseling for another time. Only one woman received FP counseling after an immunization session ended; she was also the only participant that started a method the same day as the sensitization session and after a referral from immunization.

Compounding the barriers caused by the use of referral cards, sometimes there were not enough staff present to provide FP counseling one-on-one with women. Women reported being counseled in groups if the FP counselor did not have enough time to take them on individually. This, paired with a lack of confidential space for counseling, led to women's hesitation about referrals. Occasionally, there was not a FP counselor available during a designated integrated FP/EPI services day. Although women would attend the immunization session, and therefore be exposed to FP sensitization, the facilitator was unable to refer them to anyone for same day counseling or services. Information was limited both from lack of counselors and from lack of

visuals throughout the health facilities: all facilities lacked FP materials on display in the immunization room and maternity ward.

Times between each step of the process varied widely at the eight facilities and are displayed in *Table 2.* Integrated FP and immunization sessions took between 32 minutes and over six hours. At each facility, the FP educational session started 41-60 minutes after the arrival of the first mother, but the time between arrival and the start of the immunization varied from 28-200 minutes. In all cases, the delay in the start of the immunization session was due to the late arrival of the vaccinator and vaccines or the duration of the FP dialogue.

Table 2. Patient Flow Observations

Step (from arrival of first mother)	**Time Range**	**Average**
To end of immunization session	32-243 minutes	157 minutes
To arrival of vaccinator	0-157 minutes	46 minutes
To start of FP dialogue	41-60 minutes	50 minutes
To start of immunization session	28-200 minutes	118 minutes

Discussion

Experiences of Women with Integrated Services

The results of the evaluation shed light on the implementation of the integrated services model and experiences of postpartum women with these services. The project reached women in the extended postpartum period since they attended health facilities multiple times in their infant's first year of life to receive immunizations; many women experienced more than one sensitization. Thus, even though FP sensitization sessions were not implemented consistently, their frequency and high DTP3 coverage allowed the project to reach its target beneficiaries. This finding confirmed similar ones in a Vance, et al. study that called for consistent

implementation in order for integrated FP/EPI services to be more successful and benefit their target audience.[73]

However, many women were confused by the referral mechanisms, which deterred them from pursuing FP counseling after sensitization at immunization sessions. The emphasis placed on same-day referrals in the program acted as a barrier to women who wanted to discuss their decisions with spouses or mistakenly believed that they would have to choose a contraceptive method right away when they met with the FP provider on the same day as the immunization session. This is in line with other findings, such as those from an evaluation of integrated services in India that revealed the need for consistent provider training, and confidential, individual FP counseling.[74]

Adherence to Integration Model and Implications

Observations showed CARE's integration to be different from the model proposed. Implementation was sporadic across the project, with sensitization sessions happening only at half of the observed facilities, and with non-designated staff as facilitators. Though CARE provides health worker trainings and supervision on a regular basis, the lack of knowledge among FP presenters evidences the need for training on counseling for contraceptive methods and continued supervision of healthcare workers at each facility. We identified the referral system as a weakness in this project. Confusion about the referral mechanism led women to choose not to pursue FP counseling and the lack of a private counseling area made them wary of confidentiality breaches. Staff shortages caused breaks within the referral system mechanism and prevented women from accessing services when they desired. Few facilities used referral cards, and only one facilitator presented a job aid. When the job aid was used, it contributed to an informative FP sensitization session. The need for clinical assistants to interrupt and correct FP

dialogue presenters points to the lack of supportive supervision and skills building of non-healthcare providers. Unsustainable workloads and other commitments prevented consistent implementation of the project. The time length for each step of the patient flow also varied widely between facilities, demonstrating a need for uniformity in project roll out.

Social Environment

The focus group results also shed light on the social environment in which this program took place. Participants felt that they needed their husband's approval and wanted their husband's opinions while selecting FP methods. They believed that referral mechanisms may expose them to other community members about FP and feared this due to stigma against contraceptive use. A community hesitant about family planning points to the need for continued sensitization of stakeholders, such as spouses and other family members, in order to enable women's access to FP services, and emphasizes the importance of a gender empowerment component so women are better able to discuss FP decisions with their spouses. Negative stereotypes about women who use contraception, and unclear and changing presentations about FP both point to the need for more consistent implementation of the model across all facilities and the engagement of the community.

Limitations

This evaluation's results are limited. Translation errors from local languages to French may have biased data; however, the clinical assistants involved in data collection spot-checked each other's work for accuracy. Because of the small size of the project, choosing "representative facilities" was difficult and may have influenced the results. We used available project information and the insight of CARE International Benin/Togo staff and Ministry of Health officials to help to pick the facilities to include in the evaluation.

Conclusion

Our evaluation shows strong evidence that integrated FP/EPI services are effective at creating a point of entry for postpartum women to reach services, however, this is still much research to be done. Various referral mechanisms between services should be studied in order to determine which are most effective in different contexts. Training and supervisory schedules that involve all of the health workers involved in each step of the integrated services model should be tested and evaluated. The strength of health systems is important to the success of integrated services, as they build off of the immunization platform. Future studies should look at the feasibility of these programs in combination with other system strengthening inputs, such as mechanisms to motivate health workers and improve communication across health services at facilities. Integrated services have demonstrable impact and reach otherwise inaccessible populations using a platform service. They are high-impact and through their refinement, postpartum FP use can be addressed and improved.

PUBLIC HEALTH IMPLICATIONS

The results of this study present a wealth of knowledge regarding women in the extended postpartum period and their FP decision-making in Benin, as well as the mechanisms hindering and facilitating service delivery integration processes in the HINNOU VIVO Project. Though data from the project show a clear increase in the use of FP services at integrated health facilities and a trend toward the use of more effective methods, there is much to be learned about the benefits and downfalls of integrated services, and particularly about integrated FP and infant immunization services.

The women that participated in the focus groups revealed a great deal about their interaction with health services, their decisions related to FP, and community beliefs and attitudes toward FP. The women revealed generally good feelings about the health facilities and an increase in knowledge following sensitization, but did not feel that the integration process made sense and were confused by the different steps involved, emphasizing the need for simple messages and pathways. Women spoke about the different reasons to or not to uptake a FP method. In doing so, method non-users stressed the role that a spouse plays in decision-making. Method users stressed the importance of making the decision that is best for them.

Observations made during the HINNOU VIVO study revealed inconsistent implementation of the project across twenty health facilities. Not all of the sampled facilities had FP sensitization dialogues during the immunization sessions because of staff shortages, revealing the need for a continued emphasis on the importance of health system strength before service integration. Even when FP dialogues did take place, the sessions were not as scripted in the program design, pointing to the need for continued training and supervision of program staff. Most of the sampled facilities displayed reasonable times between each step of the integration

process, demonstrating the timesaving factor that integration brings to health facilities and services.

Future Directions

The results of the study shed light on the implementation of and experiences of postpartum women with integrated infant immunization and postpartum FP services. The HINNOU VIVO Project embodies all of USAID's elements of successful integration. CARE provides health worker trainings and supervision on a regular basis. Because the project strengthens pre-existing health centers run by the Ministry of Health, they support the integration process. With CARE's strong supply chain logistics, stock-outs are rate and FP and immunization commodities are available at no cost to clients. CARE's utilization of specialized FP and immunization registers, use of trained clinical assistants to enter data online, and implementation of DHIS2 for data monitoring ensured a robust health information system to collect information on both services. And field-tested job aids (although used sparingly) contributed to successful FP dialogues at the facility where it was used.

The project was split between having and not having inhibitors of successful integration as identified by USAID. The project avoided problems of lacking supportive supervision and overburdening providers, stock-outs, and lack of collaboration with funders, but ran into problems elsewhere. The project suffered from a weak referral and follow-up system, mainly because of the use of confusing referral cards. Though referral cards are suggested strongly in the literature, it seems that, at least in this case, they overcomplicated the integration, and made it less effective. The results from this study suggest that a simple referral message may be better suited. The USAID model stressed that in order for integration to be successful, there cannot be staff turnover and shortages; the HINNOU VIVO Project suffered from staff with more than one

obligation and shortages at some facilities. In addition, inadequate provider knowledge or skills was evident at FP sensitization sessions when clinical assistants interjected to provide correct information to participants.

Limitations

This study's results are limited. Translation errors from local languages to French may have biased data; however, the clinical assistants involved in data collection spot-checked each other's work for accuracy. Because of the small size of the project, choosing "representative facilities" was difficult and may have influenced the results. Also, due to the small size of the study, the results may not be generalizable to other projects or programs.

Conclusion

Integrated FP and infant immunization services are acceptable to postpartum women and increase their self-identified efficacy in FP methods. The results of the study show that in this context, the integration implementation plan identified by USAID did not work. The system must be adjusted for each new context in order to function better within a given community. More research needs to be done in order to determine which factors are most important and least important in each program implementation area.

APPENDIXES

Appendix A. Integrated FP and Infant Immunization Services Literature Review

Name, Publication Year	Type of Integration	Design	Methods	Results
"Research Findings: Integration of Postpartum Family Planning with Child Immunization Services in Rwanda", 2013	• Services co-located and offered on the same day • Referrals from immunization to FP services	• Health providers delivered short messages to women attending routine services during group education sessions, distributed educational brochures, and screened all mothers individually to assess risk of unplanned pregnancy using LAM criteria	• Cluster randomized, two-group, separate sample, pre/post test design in fourteen randomly selected health facilities then randomly allocated to treatment or control groups • Structured observations of immunization visits and quarterly supervisory visits • Post-test data collected sixteen months after the intervention was initiated	• Increased contraceptive use: 49% at baseline and 57% at end • Control sites 58% at baseline and 51% at follow-up • Immunization rates not affected • Women did not uptake because of waiting for menses to return or fear of side effects while breastfeeding • Provider attrition was an issue and those that did not finish training did not always provide accurate messages
"Postpartum Systematic Screening in Northern Nigeria: A Practical Application of Family Planning and Maternal Newborn and Child Health Integration", 2010	• Postpartum screening and then referral if mothers deemed at risk for pregnancy	• Evaluation of a standardized screening checklist for postpartum women • Integrated survey into MNCH services at health facilities	• Pre- and post-observations of provider-client interactions • Provider interviews (post only) • Client exit interviews • Service statistics	• Providers were more likely to see clients in private, treat them with respect, ask open-ended questions, encourage clients to ask questions, respond to client's questions and concerns, use appropriate information, education and communication materials and maintain a client's privacy and confidentiality • Client's perspective: women more likely to report being able to make their own decisions, being satisfied with the services they received, being willing to come back for other services, and feeling comfortable asking questions/sharing concerns • Barriers are husband's permission, women's lack of knowledge, and no interest in receiving other services
"Successful Proof of Concept of Family Planning and Immunization Integration in Liberia", 2015	• Services co-located and offered on the same day • Referrals from immunization to FP services	• Pilot an integrated family planning and immunization model at 10 HFs in Bong and Lofa counties • Counties chosen for strong immunization performance and low contraceptive prevalence • One hospital and four clinics in each county • Vaccinators provide FP messages and same-day services referrals to co-located programs	• Compared service delivery statistics with earlier years	• Referral acceptance ranged from 10-45% a month on average, but over 80% followed up the same day and 90% accepted a method that day • Total number of FP users increased 73 and 90% • Women referred from immunization accounted for 44$ and 34% • DTP3 increased or stayed constant
"Influence of integrated services on postpartum family planning use: a cross-sectional survey from urban Senegal", 2013	• Add FP messages and referrals to existing immunization services	• Examine women's exposure to FP information and services at the time of delivery and at child immunization appointments • Determine if these points of integration are associated with greater use of postpartum FP	• Baseline data collected in 2011 at Dakar, Guédiewage, Pikine, Mbao, Mbour, and Kaolack • 205 health facilities included in the study • Exit interviews with family planning and health service clients	• FP highest among immunization service recipients • Women reported that they would have accepted a method if offered one • Integration yields higher postpartum use
"The Integration of Family Planning and Childhood Immunization Services in Togo", 1994	• Services co-located and offered on the same day • Targeted individual messages before immunization session	• Before immunization, each mother was told "Madame, your child is still young, and you should be concerned about having another pregnancy too soon. This clinic provides family planning services that can help you delay your next pregnancy. You should visit the family planning services after the immunization today for more information"	• Quasi-experimental, two-group study design • 16 facilities (urban and rural) • Interviews with eligible women • Self-administered questionnaire for providers • Service statistics	• Increase of 12% of women receiving messages in experimental group • Knowledge increase of 18% • 54% increase in new FP users • No difference in method mix • 50% of new FP clients stated that they were referred by immunization services increased immunization services

Appendix B. Focus Group Guide: Postpartum Women Using a Contraceptive Method

Guide 1: Postpartum Women Using a Modern Family Planning Method

Consent Process
Consent will be provided verbally before participant inclusion in the focus group.

Facilitator: My name is [NAME] and I am [POSITION AT ORGANIZATION]. Today, we would like to hear from you about your experience as a woman in this community who recently had a child and about your thoughts on family planning. This will help us to understand how your local health center can serve your needs better.
We asked you to participate because you decided to begin a family planning method. The information gathered in this group will be used to make the family planning services program better, so your participation is highly valued.
The group discussion should take no longer than an hour and you are welcome to move around as needed or leave at any time. We will not collect your name or any other information that can identify you, so anything you say will be confidential. To make sure we include all of your participation, we would like to record this session. The recording will be destroyed after it is written out.

Do you agree to participate and be recorded in this focus group?

Demographic Questions

Participant	**Age**	**#, Age, Gender of Children**	**Previous Method(s) [if any]**	**Current Method**
Participant A				
Participant B				
Participant C				
Participant D				
Participant E				
Participant F				
Participant G				
Participant H				
Participant I				
Participant J				

Group Introductions and Guidelines

Facilitator: Thank you so much for your time and for agreeing to talk to us today, your opinions are really valuable to us. It is important that no one discusses the information shared in this room with anyone else. You do not need to agree with each other and we are interested in hearing anything good but also anything bad about your experiences, so that we can learn from it. You do not have to participate and you can leave at any moment if you wish. Do you have any questions for me before we start?

May I begin recording?

[Tape recorder turned on.]

Opening Questions

1. Can you tell me about your experiences going to [*NAME OF HF*]?
    a. Probes:
        i. How easy is it for you to get there?
        ii. What are the staff members like?

Physical Process

2. While you and others waited for your children to be vaccinated, someone from the health center spoke to the group about family planning. What did you learn during this session?
3. What was not talked about that you wished you heard more about?
    a. Probes:
        i. What do you still have questions about?
4. When your child was vaccinated, the vaccinator mentioned family planning to you and offered you a referral to the family planning provider. What did you think about that?
    a. Probes:
        i. Please tell me about any privacy concerns you had.
5. If you are interested in going to see a family planning provider after the vaccination, the vaccinator gives you a referral card and tells you where to go to talk more about family planning. Some women then go to see a family planning provider right away, others come back another day. Can you tell us about your experience?
    Probes:
        ii. How did you decide whether to go the same day or to come back?
        iii. Did you have enough time to go the same day?

Decisions Regarding Family Planning

You decided to start a family planning method. I would like to learn more about how you made that decision.

6. Why did you decide to start a family planning method?
    a. Probes:
        i. Who else, if anyone, helped you make your decision?
        ii. What things did you think about when making this decision? Possible reasons to initiate include number of children, age, health concerns, pressure from others, cost [or lack of cost] of a family planning method, cost of another child, independence.

7. Can you tell me about your experience with your family planning provider?
    b. Probes:
        i. How did you decide which family planning method to choose?
        ii. What things during your visit helped you make your decision?
        iii. Did you feel that your provider told you about all of your options and the possible risks?
        iv. How comfortable did you feel with your provider?

Community Changes

8. What would you tell a friend who is thinking about starting a family planning method?
9. What options does a woman have if she becomes pregnant and does not want another child?
10. What do people in the community think about using family planning methods?
    a. Probes:
        i. What do people say about women who use family planning methods?
        ii. What do people think is good about family planning methods?
        iii. What do people think is bad about family planning methods?

Closing Questions

11. Is there anything I haven't covered that you think is important and want to talk about?

[Tape recorder turned off.]

Conclusion:

This concludes the focus group.

Do you have any other questions at this time?

If, at a later time, you have other questions or comments you can contact Blake at blake.erhardt-ohren@care.org or on Skype at the same address (blake.erhardt-ohren@care.org).

Thank you for your participation.

Appendix C. Focus Group Guide: Postpartum Women Not Using a Contraceptive Method

Guide 2: Postpartum Women Not Using a Modern Family Planning Method

Consent Process
Consent will be provided verbally before participant inclusion in the focus group.

Facilitator: My name is [NAME] and I am [POSITION AT ORGANIZATION]. Today, we would like to hear from you about your experience as a woman in this community who recently had a child and about your thoughts on family planning. This will help us to understand how your local health center can serve your needs better.
We asked you to participate because you decided not to begin a family planning method. The information gathered in this group will be used to make the family planning services program better, so your participation is highly valued.
The group discussion should take no longer than an hour and you are welcome to move around as needed or leave at any time. We will not collect your name or any other information that can identify you, so anything you say will be confidential. To make sure we include all of your participation, we would like to record this session. The recording will be destroyed after it is written out.

Do you agree to participate and be recorded in this focus group?

Demographic Questions

Participant	**Age**	**#, Age, Gender of Children**	**Previous Method(s) [if any]**
Participant A			
Participant B			
Participant C			
Participant D			
Participant E			
Participant F			
Participant G			
Participant H			
Participant I			
Participant J			

Group Introductions and Guidelines

Facilitator: Thank you so much for your time and for agreeing to talk to us today, your opinions are really valuable to us. It is important that no one discusses the information shared in this room with anyone else. You do not need to agree with each other and we are interested in hearing anything good but also anything bad about your experiences, so that we can learn from it. You do not have to participate and you can leave at any moment if you wish. Do you have any questions for me before we start?

May I begin recording?

[Tape recorder turned on.]

Opening Questions

12. Can you tell me about your experiences going to [*NAME OF HF*]?
    a. Probes:
        - How easy is it for you to get there?
        - What are the staff members like?

Physical Process

13. While you and others waited for your children to be vaccinated, someone from the health center spoke to the group about family planning. What did you learn during this session?
    a. Probes:
        - What was not talked about that you wished you heard more about?
        - What do you still have questions about?
14. When your child was vaccinated, the vaccinator mentioned family planning to you and offered you a referral to the family planning provider. What did you think about that?
    c. Probes:
        - Please tell me about any privacy concerns you had.
15. If you are interested in going to see a family planning provider after the vaccination, the vaccinator gives you a referral card and tells you where to go to talk more about family planning. Some women then go to see a family planning provider right away, others come back another day. Can you tell us about your experience?

    Probes:
        - How did you decide whether to go the same day or to come back?
        - Did you have enough time to go the same day?
        - Do you have to wait long to see a family planning provider?

Decisions Regarding Family Planning

You decided not to start a family planning method. I would like to learn more about how you made that decision.

16. Why did you decide not to start a family planning method?
    b. Probes:
        - Who else, if anyone, helped you make your decision?
        - What things did you think about when making this decision? Possible reasons not to initiate include number of children, age, health concerns,

pressure from others, cost [or lack of cost] of a family planning method, cost of another child, independence.

17. Can you tell me about your experience with your family planning provider?
    d. Probes:
        - What things during your visit helped you make your decision?
        - Did you feel that your provider told you about all of your options and the possible risks?
        - How comfortable did you feel with your provider?

Community Changes

18. What would you tell a friend who is thinking about starting a family planning method?
19. What options does a woman have if she becomes pregnant and does not want another child?
20. What do people in the community think about using family planning methods?
    b. Probes:
        - What do people say about women who use family planning methods?
        - What do people think is good about family planning methods?
        - What do people think is bad about family planning methods?

Closing Questions

21. Is there anything I haven't covered that you think is important and want to talk about?

[Tape recorder turned off.]

Conclusion:

This concludes the focus group.

Do you have any other questions at this time?

If, at a later time, you have other questions or comments you can contact Blake at blake.erhardt-ohren@care.org or on Skype at the same address (blake.erhardt-ohren@care.org).

Thank you for your participation.

Appendix D. Focus Group Observation Form

Observation #:
Location:
Date:
Observer: Blake Erhardt-Ohren

Event	Time	Notes
First person arrives		
Vaccination session begins		
Number of arrivals during the session	**N/A**	
Vaccination session ends		
Family planning services open		

Women leave for the health facility		
Women are seen at family planning services		
1	**Arrival:** **In:** **Out:**	
2	**Arrival:** **In:** **Out:**	
3	**Arrival:** **In:** **Out:**	
4	**Arrival:** **In:** **Out:**	
5	**Arrival:** **In:** **Out:**	
6	**Arrival:** **In:** **Out:**	
7	**Arrival:** **In:** **Out:**	
8	**Arrival:** **In:** **Out:**	
9	**Arrival:** **In:** **Out:**	
10	**Arrival:** **In:** **Out:**	
11	**Arrival:** **In:** **Out:**	
12	**Arrival:** **In:** **Out:**	
13	**Arrival:** **In:** **Out:**	

14	**Arrival:** **In:** **Out:**	
15	**Arrival:** **In:** **Out:**	
16	**Arrival:** **In:** **Out:**	
17	**Arrival:** **In:** **Out:**	
18	**Arrival:** **In:** **Out:**	
19	**Arrival:** **In:** **Out:**	
20	**Arrival:** **In:** **Out:**	
Family planning services close		

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