While many Senegalese mothers visit health facilities to immunize their newborns, far fewer discuss family planning options with a health worker. Integrating family planning counseling into immunization services is a promising practice to address reproductive health needs in the extended postpartum period. We developed a behaviorally informed model that integrates these two services to help more women access the family planning option that is right for them.

Summary

Spacing pregnancies has been shown to have long-term benefits for the health of mothers, newborns, and families overall. The months following childbirth are an opportune time for women to consider if and when they would like to have more children and which family planning method meets their needs. Yet for a myriad of reasons, many new mothers don’t have a clear moment to make this consideration, which can result in having another child sooner than desired. Integrating counseling on family planning into other postpartum services can help more women make whichever choice is right for them and then follow through on their goal.

In Senegal, over 60% of postpartum women in 2015 had an unmet need for family planning—in other words, they want to stop or delay childbearing, but aren’t currently using a contraceptive method. The World Health Organization has identified the integration of family planning (FP) and immunization services as a promising high-impact practice to help new mothers achieve healthy spacing for their pregnancies during the extended postpartum period from 0 to 15 months after childbirth. And indeed, in 2015, over 90% of new mothers in Senegal came to health facilities at least once to get their newborns vaccinated. However, the integration of these two services was a largely untested proposition.

Moreover, simply making the two services available at the same time and place may not necessarily solve the underlying issue, as integration is aimed at a complicated context: busy health facilities with overstretched health workers serving clients who have traveled long distances to immunization days with their young children. These complications make this problem well-suited to a behavioral solution that can reshape the underlying context to create an environment that facilitates integration.

1 Cadre stratégique national de planification familiale 2016-2020
2 Enquête Démographique de Santé - Continue 2015
Despite high-level political commitment to integrating family planning and immunizations services in Senegal, national health officials had concerns over a lack of rigorous evidence to support the practice, a fear that integration could potentially negatively impact immunization rates, and an absence of clear guidelines on how to effectively integrate services during hectic immunization days. Seeking to address this gap and help Senegal’s Ministry of Health and Social Action (MOHSA) design and implement an effective model of integration, ideas42 and IntraHealth International partnered to iteratively design new solutions to address the behavioral barriers that impede successful integration of family planning and immunization services.

Identifying behavioral barriers

In conducting a behavioral diagnosis on the obstacles to discussing FP during immunizations days, we identified barriers to integration for both health workers and clients:

- **Health workers** have a narrow view of the purpose of “immunization days” that leads them to prioritize immunizations over other postpartum services. At the same time, they receive no cues to help them remember to discuss FP during this vital moment.

- **Clients** may not yet have considered a need for FP, instead perceiving that events outside their control will decide if they have closely spaced births, or that FP is only for women who have finished having all their children. Moreover, even for women who are interested in using FP, the possibility that they may experience side effects or disapproval from family members exerts a disproportionate influence over their decisions, outweighing the more amorphous long-term benefits of birth spacing. In addition, women are not presented with a clear moment during the postpartum period to decide whether to adopt FP.

Faced with this complex context, we focused our efforts on (1) developing a systems-level intervention that would prompt conversations between clients and health workers on FP (as well as other family health topics) on immunization days, and (2) supporting these conversations with accurate and timely information for both health workers and clients.

A Three-Pronged Solution

In close collaboration with MOHSA, we undertook an iterative design process that incorporated feedback from health workers and clients, as well as national, regional and district health officials, during co-design sessions, user-testing interviews, and field tests. We designed the following three-pronged intervention to address the behavioral barriers facing both health workers and clients that we uncovered during our diagnosis research:

1. **A series of three referral cards** that prompts health workers and clients to discuss complementary health behaviors particular to their child’s age during immunization days. The design features include:
a. A “family health” frame around immunization, nutrition, and birth spacing to expand the narrow mental model of immunization days as only concerning vaccinations.

b. A visual checklist with an image for the three health behaviors to help health workers and clients remember to discuss each topic.

c. A cue for clients to set a specific time to speak with a health worker about birth spacing and thus to help clients follow through on their intentions.

2. A mobile health drama for clients in which local and relatable performers act out a serial drama over the course of ten vocal messages that dispel myths about FP and give clients timely information about other important health topics from 0 to 15 months after childbirth.

3. An interactive mobile training course for health workers delivered via interactive voice response (IVR) that builds and tests their competency in discussing immunization, child nutrition, and family planning with clients through a series of eight weekly vocal messages.
During our field work, we observed substantial variety in the location and timing of immunization services, as well as the type of health workers responsible for carrying out the intervention activities across health posts. Rather than prescribe an exact model for implementation, we baked an appreciation for this heterogeneity into our design, working with health post staff to develop a custom “plan of action” tailored to their facility during the implementation training. This approach aimed to increase ownership of the intervention among health workers, and to ensure that the intervention was appropriate for the context of a given health post.

Results

We conducted a range of field tests to gauge the feasibility, acceptability, and effectiveness of this intervention with health workers and clients. In 2017, we ran a demonstration pilot test for one month at four health posts in the central Kaolack region, and followed this in 2019 with a feasibility pilot test for two months at eight health posts in the geographically and culturally distinct southern region of Ziguinchor. Across these two pilots, we found that:

- By distributing referral cards, health workers integrated messaging on birth spacing into conversations with 82-96% of clients attending immunization services during implementation.
- Of those clients receiving referral cards, 67-90% elected to discuss birth spacing with a qualified health worker the same day.
- Facility records for FP consultations indicated that 52% of clients who adopted a new FP method during the implementation period had been referred through the intervention’s referral cards.
- Meanwhile, of the clients enrolled in the IVR message system, 70% of those interviewed said they learned something new about FP or key maternal and child health topics.
- Immunization rates at the treatment facilities did not register a meaningful decrease from the rates prior to implementation, suggesting that the intervention can increase conversations on birth spacing during immunizations days without affecting Senegal’s high immunization rate.

We had planned to run a cluster randomized controlled trial that we launched in early 2018, but we were unable to complete this evaluation due to the sudden outbreak of a ten month-long national health workers strike that paralyzed the public health system in Senegal. In response, we pivoted to a more open-ended qualitative evaluation strategy that allowed us to capture valuable insights and recommendations from local stakeholders in each of the three regions where we had prepared to launch our intervention. Ultimately, this sustained engagement with stakeholders allowed us to iterate further upon the intervention and generate the support from national and district officials that we needed to implement an improved intervention when the strike ended.

Even though we were not able to conduct a rigorous evaluation and thus were unable to measure a counterfactual to our intervention, qualitative evidence from our two field tests of the intervention demonstrated clear indications of behavior change supporting the integration of FP into immunization services.
services. This supports WHO’s assertion that a carefully-designed integration program can help more people access family planning options, and indicates the potential for piloting this intervention in new contexts, and for scaling this model in tested contexts.

**Takeaways**

The referral cards and the mobile voice messages for health workers and clients both show strong promise as feasible, acceptable, and effective methods of prompting both health workers and clients to discuss FP counseling in the extended postpartum period. Digital files for each of these components can be found in the appendix below.

These initial results suggest that health workers can support clients’ access to effective family planning options by reframing immunization services to include general postpartum support for families, and, in particular, by taking advantage of this critical touchpoint to discuss key messages on family planning. There is cogent potential to adapt and scale this intervention to other regions and countries to support the health of mothers, babies, and families.
Referral cards

Three referral cards prompt providers and clients to discuss family health topics, including birth spacing, during immunization days.

0 - 2 mois

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2 - 6 mois

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6 - 15 mois

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Key messages

Key messages were developed in close collaboration with the Ministry of Health and Social Action and are displayed on the organization tool for the referral cards to remind health workers of the specific key messages to deliver on family health to clients.
Messages and scripts

Mobile health drama messages (in Wolof and French) and scripts (in French and English) as well as the interactive mobile training course messages (in Wolof and French) and scripts (in French and English) can be found on ideas42’s website.

IVR message samples

**Clients: Explaining side effects**

*Khady:* My sister-in-law told me that when she started using family planning, she started bleeding for several weeks. Is this typical?

*Aminata:* Well, the midwife explained to me that each family planning method can affect each woman differently. So maybe the method that your sister-in-law used was not the best method for her.

**Health workers: Risks of family planning**

*Khady:* I’m afraid of the risks of birth spacing, and I’m not sure of its benefits.

**Question:** Is birth spacing dangerous?
Press 1 for “yes” (incorrect answer)
Press 2 for “no” (correct answer)

*Khady:* 1 (“yes”)

**Answer:** Birth spacing is waiting at least 2 years after the birth of a baby before having another baby. There are many safe and healthy methods of birth spacing...