

# GLOBAL HEALTH

## Innovation Insight Series



Women learn to use CycleBeads in a community meeting

Photo courtesy of the Institute for Reproductive Health, Georgetown University

## CYCLEBEADS III: Implementing Too Much, Too Soon

WASHINGTON, DC

ESTABLISHED 2002

VICTORIA JENNINGS, INVENTOR

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CYCLE TECHNOLOGIES

### THE PROBLEM/SOLUTION SPACE

Unplanned pregnancy directly affects women of childbearing age and their families, but also results in significant costs to the countries where they live. Even with worldwide advancements and the availability of medical and surgical contraception, as well as user-directed methods, more than 80 million women in developing countries are affected by unplanned pregnancies each year, due to their non-use of contraceptives or their use of ineffective birth control methods. This leads to 30 million unplanned births, 40 million abortions, and 10 million miscarriages annually.<sup>1</sup> According to a report by the United Nations Population Fund and the Guttmacher Institute, providing safe access to modern family planning methods to all women with an unmet need would prevent 21 million

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unplanned births, 79,000 maternal deaths, and 1.1 million infant deaths per year in the developing world.<sup>2</sup>

Globally, the highest rates of unplanned pregnancies are in sub-Saharan Africa and parts of Asia. In these regions, it is culturally more common for women to marry young,<sup>3</sup> and medical and surgical contraceptive solutions are not always accepted or readily available due to economic, political, and religious restrictions. Natural contraception alternatives exist, but they are often poorly understood or perceived as cumbersome and too complex. As a result, they are not always practiced correctly or consistently and their effectiveness is compromised.

### ABOUT CYCLEBEADS AND THE STANDARD DAYS METHOD

To help address the issue of unplanned pregnancy and maternal mortality in the developing world, Victoria Jennings, a researcher at the University of Georgetown's Institute for Reproductive Health (IRH), recognized the need for an intuitive, natural contraception method that could meet the needs of families that chose not to use medical or surgical alternatives. IRH developed the Standard Days Method (SDM), a simple natural family planning system that could be implemented in all countries and cultures across the globe. Researchers studied thousands of menstrual cycles and concluded that by abstaining from intercourse between the 8th and 19th days of their menstrual cycles, women could significantly reduce their likelihood of getting pregnant.<sup>4</sup>

Along with developing the SDM approach, Jennings wanted to deliver a product to make the practice easily understandable and accessible to women. As a result, she and her team created CycleBeads, a color-coded string of beads that represented a woman's menstrual cycle and allowed her to manage her fertility. In clinical trials conducted by IRH, SDM

used in conjunction with CycleBeads was shown to be 95 percent effective in preventing pregnancy when practiced correctly.<sup>5</sup>

"Though not quite as effective as hormone methods or IUD implants, it is equal to if not more effective than other user-directed methods, like condoms or diaphragms," said Leslie Heyer, founder of Cycle Technologies, who partnered with Jennings' team and licensed the rights to bring CycleBeads to market.<sup>6</sup> Cycle Technologies was responsible for worldwide manufacturing, quality, sales, and distribution of the product, while IRH remained involved in helping pilot and roll out the technology in emerging markets.

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### ONE CHALLENGE: IMPLEMENTING TOO MUCH, TOO SOON

One of IRH's first opportunities to roll out SDM and CycleBeads was in Mali, West Africa. Jennings and team were asked by the head of family planning at the Ministry of Health (the Ministry) to initiate a large-scale rollout. "There was great enthusiasm and interest in doing this all over the country," Jennings recalled. However, given Mali's traditional values, low literacy, and weak infrastructure, "We had concerns," Jennings said. At the time of the rollout, family planning was used by only 4 percent of women of fertile age.<sup>7</sup> "It is difficult to start from absolute zero and get to 100 in a short period of time, in terms of getting a woman or couple to move from no family planning to thinking about using a natural family planning method based on their fertility cycle," she noted.

“But, given the enthusiasm in Mali, we decided to move forward and try to support the rollout across the entire country. Cycle Technologies accepted an order for approximately 40,000 sets of the product to support the rollout across Mali.

Unfortunately, the initial implementation did not go well. “We were less strategic than we should have been,” admitted Jennings. “We didn’t lay the needed groundwork, and we tried to do too much too quickly.” In particular, fostering buy-in among health workers and expanding their capacity to offer the method was more difficult than the team imagined. Raising public awareness about the availability of the new method and how it worked was another challenge. In addition, IRH had trouble establishing an effective delivery and support model for the product. “It was difficult to effectively provide assistance anywhere because we were trying to do it everywhere,” Jennings said. “We spread ourselves and the Ministry very thin.” Recognizing that uptake was lower than expected and that valuable time and resources were being expended, the team needed a recovery plan.



Photo courtesy of the Institute for Reproductive Health, Georgetown University

*A counselor explains CycleBeads at a local clinic*

### THE SOLUTION: PILOTING WITH A SYSTEMS APPROACH

Under Jennings’ leadership, IRH completely recast its implementation approach, adopting a “systems approach” to infiltrating the challenging reproductive health market in Mali. As defined by ExpandNet and the World Health Organization, the systems approach—or systems thinking—recognized that the expansion and institutionalization of innovations occurred in a complex network of interactions and influences, which should

be recognized in order to achieve scaling-up success.<sup>8</sup> Interrelationships were especially important between the innovation, the user organization, the resource team, and the larger environment within which the rollout was planned. A change with any one of these elements affected the others. The implementation team had to strike an appropriate balance among these critical elements for the scale-up to be a success.<sup>9</sup>

Using the systems framework for guidance, the first thing IRH did was to focus its efforts. It abandoned the countrywide approach and instead identified four regions that would serve as suitable locations for some initial pilots (from which the project could eventually expand). In addition, IRH sought to align and improve key aspects of its rollout strategy. Specifically, the team devoted significant attention to: (1) getting healthcare providers on board, (2) moving the product into the system, and (3) building public awareness.

To prepare health providers to offer SDM and CycleBeads, and to engender their support, IRH decided to partner with organizations already on the ground in Mali. “CARE, for example, had a strong network of community health workers,” said Jennings, which the team could leverage. In collaboration with its partners, the team developed a customized, comprehensive training curriculum for the health workers that “cascaded” from a

central team of highly skilled experts, to a new team of trainers in each region, and then down to the individual care providers. “When you do this on a slightly smaller scale, you can move more slowly and check on the quality as the training cascades through the network to make sure that the health workers are really prepared,” explained Jennings. “They have to be confident offering the service to the women.” Through this process, health workers also became more enthusiastic about the method as an alternative to traditional contraceptives.

The next challenge was to improve logistics and distribution for CycleBeads in Mali. “CycleBeads have to be in the system,” said Jennings. “It’s not enough to have them in the central warehouse through the Ministry. There has to be a process for getting them into the hands of the provider so that she can make them available to women.” In the preliminary rollout, CycleBeads did not appear on the order forms community health workers used to procure products. “And, nobody knew how to fill out the order forms, anyway, nor did they know why they should be ordering CycleBeads for their clinic site,” Jennings noted. “So we worked with the logistics and procurement people; we provided them with information and technical assistance to implement CycleBeads into their system so that these orders could be placed.” The team also helped orchestrate a forecasting process for procuring more CycleBeads, as well as contributing to discus-

sions about how physical distribution would be managed given Mali’s suboptimal transportation infrastructure.

While time consuming and difficult, figuring out the details to this level was essential to making sure the product would get through “the last 100 yards,” as Jennings expressed it.

With health workers on board and the right logistics in place, the final challenge was to build public awareness so that women would be receptive to trying the method. Initially, the Ministry believed that CycleBeads should be added to the family planning methods posters that hung in clinics. Ministry representatives maintained that the posters

would prompt women to inquire about the method, giving health workers an opening to explain the approach. However, when IHR team members evaluated the larger environment, they realized that this approach failed to target the best potential users. Typically, women who visited the clinics came in to get a specific birth control method. “They know about pills and want them, or they know about injectables and want that,” said Jennings. “But CycleBeads were so new—and a natural alternative—that people who would have potentially wanted them were not going to clinics to find them.” IRH needed a way to reach women who would be more open to natural family planning options.

To do so, the team designed a public outreach program. “It’s called ‘Each One Invites Three.’ A person who starts using CycleBeads receives three invitation cards to invite others to come to the clinic to find out more about family planning and CycleBeads,” Jennings described. “It is a low literacy, cartoonish flier with information about CycleBeads and other methods of family planning.... In a setting where goods are so scarce, people actually like the idea of having a little novelty card in their hand, and they want to show it to a friend. We tested the process and it works.” IRH also partnered with Population Services International (PSI) in Mali, which specializes in social marketing of contraceptives. Through the IRH-PSI partnership, information and promotions were provided to prospective users to encourage them to learn more.

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In addition to taking these actions, Jennings and team devoted considerable time and resources to aligning other aspects of their systems approach in the four pilot regions. In combination, these activities allowed them to make significant strides in expanding knowledge about and use of SDM and CycleBeads.<sup>10</sup> Moreover, they provided a strong base of experience from which IRH and the Ministry could now effectively increase the implementation. Reflecting on the situation and her lessons learned, Jennings noted, “If you’re trying to do all of those things across the country without having tested them in pilots, you’re going to make mistakes.” ♦

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#### NOTES

- 1 Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012,” Guttmacher Institute and UNFPA, June 2012, <https://www.unfpa.org/webdav/site/global/shared/documents/publications/2012/AIU%20Paper%20-%20Estimates%20for%202012%20final.pdf> (August 14, 2012).
- 2 Ibid.
- 3 “Unplanned Pregnancy Statistics,” eHow-Mom, [http://www.ehow.com/about\\_4611925\\_unplanned-pregnancy-statistics.html](http://www.ehow.com/about_4611925_unplanned-pregnancy-statistics.html) (June 19, 2012).
- 4 “Natural Family Planning: The Standard Days Method,” Natural-Family-Planning.Info, <http://www.natural-family-planning.info/standard-days-method.htm> (June 19, 2012).
- 5 Ibid.
- 6 All quotations are from interviews conducted by the authors unless otherwise cited.
- 7 According to Jennings.
- 8 “Nine Steps for Developing a Scale-Up Strategy,” World Health Organization and ExpandNet, 2010, <http://www.expandnet.net/PDFs/ExpandNet-WHO%20Nine%20Step%20Guide%20published.pdf> (July 5, 2012).
- 9 Ibid.
- 10 “FAM Project: Expanding the Method Mix in Mali,” Institute for Reproductive Health, [http://www.irh.org/?q=content/fam\\_mali](http://www.irh.org/?q=content/fam_mali) (July 5, 2012).