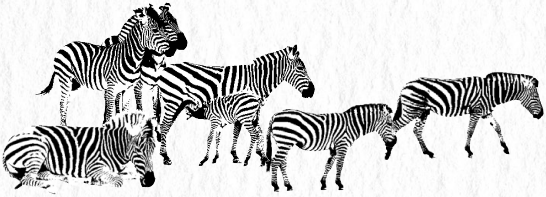
POSITIVE DEVIANCE WISDOM SERIES



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Combating Malnutrition
in the Land of a Thousand Rice Fields

Positive Deviance Grows Roots in Vietnam[1]

by Arvind Singhal, Jerry Sternin, & Lucía Durá

POSITIVE DEVIANCE enables communities to discover the wisdom they already have, and then to act on it.

"Sternin, you have six months to show results," noted Mr. Nuu, a high-ranking official in the Vietnamese Ministry of Foreign Affairs. "What? Six months? Six months to demonstrate impact?" Jerry Sternin could not believe his ears. "Yes, Sternin, six months to show impact, or else, I will not be able to extend your visa."

In December 1990, Jerry Sternin, accompanied by his wife Monique and ten-year old son Sam, arrived in Hanoi to open an office for Save the Children, a U.S.-based NGO. His mission: To implement a large scale program to combat childhood malnutrition in a country where two thirds of all children under the age of five suffered from malnutrition.

The Vietnamese government had learned from experience that results achieved by traditional supplemental feeding programs were not sustainable. When the programs ended, the gains usually tapered off. The Sternins had to come up with an approach that enabled the community, without much outside help, to take control of their nutritional status.

And quickly! Mr. Nuu had given the Sternins six months!

CRISIS OR OPPORTUNITY

From years of studying Mandarin, Jerry knew that the Chinese characters for "crisis" were represented by two ideograms: danger and opportunity. Perhaps there was an opportunity to try something new in Vietnam. Necessity is the mother of invention. If old methods of combating malnutrition would not yield quick and sustainable results, the Sternins wondered if the construct of Positive Deviance, coined a few years previously by Tufts University nutrition professor Marian Zeitlin,[1] might hold promise.

Zeitlin broached the notion of PD as she tried to understand why children in some poor households, without access to any special resources, were better nourished than children in other households. What were the parents of these children doing? Perhaps combating malnutrition called for an assets-based approach: that is, identifying what's going right in

a community and finding ways to amplify it, as opposed to the more traditional deficit-based approach of focusing on what's going wrong in a community and fixing it from the outside.

PD sounded good in theory. But no one, to date, had operationalized the construct to actually design a field-based nutrition intervention. Might it work in a community-setting? How? The Sternins had no road maps or blueprints to consult. Where to begin?

photo: PDI

Women weighing children in an interventional village

Beginning close to Hanoi, their home base, made sense. Childhood malnutrition rates were high in Quang Xuong district in Thanh Hóa province, south of Hanoi. After a four-hour ride on Highway One in a Russian car (powered by a noisy tractor engine), the Sternins arrived on locale. The Ho Chi Minh trail, the major supply route for the Vietcong guerillas during U.S. hostilities in Vietnam, snaked through Quang Xuong, so suspicion of Americans, was noticeably high. The Sternins' first task was to build trust with all stakeholders. The rest would follow.

After several days of consultation with local officials, four village communities were selected for a nutrition baseline survey. Armed with six weighing scales and bicycles, health volunteers weighed some 2,000 children under the age of three in four villages in a record 3.5 days. A growth card for each child, with a plot of their age and weight, was compiled. Some 64% of the weighed children were found to be malnourished.

No sooner was the data tallied, with abated breath the Sternins asked, "Are there any well-nourished children who come from very, very poor families?"

The response: "Yes, yes, there are some children from very, very poor families who are healthy!"

These poor families in Thanh Hóa who had managed to avoid malnutrition without access to any special resources represented the Positive Deviants.
"Positive" because they were doing things right, and "Deviants" because they engaged in behaviors that most others did not.

What behaviors were these PD families engaging in that others were not? To answer this question, community members decided to visit with six of the poorest families with well-nourished children in each of the four villages. The Sternins believed that if the community self-discovered the solution, they were more likely to implement it.

Palpable excitement bathed the community hall. The self-discovery process yielded the following key PD practices among poor households with well-nourished children:

- Family members added greens of sweet potato plants to their children's meals. These greens are rich in beta carotene, the miracle vitamin, and other essential micro nutrients e.g. iron and calcium.
- Family members collected tiny shrimps and crabs from paddy fields adding them to their children's meals. These foods are rich in protein and minerals.

Family members and villagers did not have this nutritional scientific knowledge, but that wasn't important. Interestingly, these foods were accessible to everyone, but most community mem-

photo: Modified from orig. by Intl. Rice Research Inst.,

Shrimps and crabs for the taking in Vietnamese rice paddies

POSITIVE DEVIANCE
is based on the premise that if the community self-discovers the solution, they are more likely to implement it.

"A thousand hearings isn't worth one seeing, and a thousand seeings isn't worth one doing." PD emphasizes "doing."

bers believed they were inappropriate for young children. Further, besides feeding their children uncommon food,

- PD caregivers were feeding their children three to fourtimes a day, rather than the customary two meals;
- PD caregivers were actively feeding their children, making sure there was no food wasted; and
- PD caregivers washed the hands of the children before and after they ate.

DOING NOT TELLING

With the "truth" discovered, the natural urge was to go out and tell the people what to do. Various ideas for "telling" were brainstormed: household visits, attractive posters, educational sessions, and others. However, from previous field-based experience in other countries, the Sternins knew that old habits die hard; new ones, even when they hold obvious advantages, are hard to cultivate. Their experience suggested that such "best practice" solutions almost always engendered resistance from the people. The Sternins coined a phrase for it, the "natural human immune system rejection" response to being told what to do by others.

As the brainstorming wound down, a skeptical village elder volunteered quietly: "A thousand hearings isn't worth one seeing, and a thousand seeings isn't worth one doing."

On the car ride back to Hanoi, the Sternins talked about the wisdom inherent in the elder's remark. Could they help design a nutrition program which emphasized "doing" more than "seeing" or "hearing?"

A two-week nutrition program was designed in each of the four intervention villages. Mothers, other family members, or caregivers whose children were malnourished, were asked to forage for shrimps, crabs, and sweet potato greens. The focus was on action. Armed with small nets and containers, mothers waded the paddy fields picking up tiny shrimps and crabs.

Caregivers learned how to cook new recipes using the foraged ingredients. Again, the emphasis was on "doing."

photo: PDI

A cooking session in progress in an intervention village

photo: PDI

Children's weight was plotted on charts to map their growth

Before the caregivers sat down to feed the children, they weighed their children, and plotted the data points on their growth chart. The children's hands were washed, and the caregivers actively fed the children, ensuring no foodwas wasted. Some caregivers noted how their children seemed to eat more in the company of other children.

When returning home, mothers were encouraged to break the traditional two-meal-a-day practice into three or four smaller portions. Such feeding and monitoring continued for two weeks. Caregivers could visibly see the children becoming healthier. The scales were tipping!

After the pilot project, which lasted two years, malnutrition had decreased by an amazing 85 percent in the communities where the PD approach was implemented. Over the next several years, the PD intervention became a nationwide program in Vietnam, helping over 2.2 million people, including over 50,000 children improve their nutritional status.

Born out of necessity, this pioneering PD operationalization experience in Vietnam, with all its struggles and learnings, yielded several key insights.

POSITIVE DEVIANCE approach is informed by and bathed in data. Data is collected at every step and openly posted for the community to monitor the progress. Data informs where problems and solutions lie.

In the PD approach, the change is led by internal change agents who present the social proof to their peers.

photo: PDI

Monique Sternin listening to a discussion on nutrition

First, the PD approach turns the dominant "transmission" interventional KAP (knowledge,attitude, practice) framework on its head. As opposed to subscribing to the notion that increased knowledge changes attitudes, and attitudinal changes influence practice, PD believes in changing practice. PD believes that people change when that change is distilled from concrete action steps.

Second, the PD approach questions the traditional role of outside expertise, believing that the wisdom to solve the problem lies inside. While social change experts usually make a living discerning community deficits and then implementing outside solutions to change them, in the PD approach, the role of experts is framed differently. The community

members are the experts. The facilitator's role is to help the community find the Positive Deviants, identify their uncommon but effective practices, and then design a community intervention to make those practices accessible to everyone.

Third, in the PD approach, the change is led by internal change agents who present the social proof to their peers. As the PD behaviors are already in practice, the solutions can be implemented without delay or access to outside resources. Further, the benefits can be sustained, since the solution resides locally.

Six months after the Sternins' arrival in Vietnam, a beaming Mr. Nuu from the Vietnamese Ministry of Foreign Affairs handed them their renewed visa. They would end up living in Vietnam for six years.

The PD approach had found Vietnam to be a fertile ground to grow roots. Now the saplings could travel places, finding nurturance in other soils.

Research shows that many younger siblings born several years after the project were able to avoid malnutrition altogether - a clear demonstration that the change in behavior had stuck with family members and caregivers.

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[1]This pioneering Vietnam story draws upon numerous conversations and audiotaped interviews with both Monique and the late Jerry Sternin. To learn more read (1) Pascale, R.T., and Sternin, J. (2005). Your company's secret change agents. *Harvard Business Review*. May, 1-11; (2) Sternin J. and Choo R. (2000).The power of Positive Deviance. *Harvard Business Review*, January-February: 14-15; and (3) Zeitlin, M., Ghassemi, H., and Mansour, M. 1990. *Positive deviance in child nutrition*. New York: UN University Press.

Will Ramón Finish Sixth Grade?

Positive Deviance for Student Retention in Rural Argentina

by Lucía Durá & Arvind Singhal

POSITIVE DEVIANCE is an approach that is uniquely successful in extremely difficult situations, where perhaps other approaches have failed.

"I am Ramón, a first-grade student in San Pedro's elementary school. This bulletin board in my classroom displays the birthdays of the 24 students in my class. My birthday is on September 11th, and I look forward to the next one."

While all 24 students in Ramón's first grade class await their birthdays, they are unaware of how bleak their future might be. Within two years, by the time they are in third grade, it is likely that 5 out of the 24 will have stopped going to school. By the sixth grade, another 7 out of the remaining 20 will have dropped out.[1] In 2000, a first grader in San Pedro and, more generally, in Argentina's rural province of Misiones would have had a 3 in 4 chance of getting to third grade and a 1 in 2 chance of making it past the sixth grade. Ramón's entering class of 24 would have become a class of 12 students by seventh grade.

photo: PDI

Birthday bulletin board in Ramón's classroom

What explains this sharp drop in school enrollment rates in Misiones? Why do so many Ramóns drop out of school, missing out on learning basic literacy and numeracy skills? The answers, in part, lie in the traditional roles that young children in Misiones play in subsistence agriculture. For instance, Ramón may drop out of school:

- To help his parents plant cassava branches, a staple food in Northeastern Argentina.
- To help with the tobacco harvest. Children like Ramón are well equipped to pick tobacco leaves as one has to squat low in order to pluck them from the bottom, keeping the upper ones intact.
- To help with weeding, a non-complex task which children carry out with relative ease. Weeding, much like tobacco harvesting, requires long hours of squatting in the fields.


photo: Hannes_Foto @ flickr.com

Children play an important role in subsistence farming

In essence, young children in Misiones play a key role in generating family livelihoods. For them, and their parents, school attendance

Photo: PDI

Folded arms and defying glares from teachers

is a relatively low priority. Survival takes precedence over education. However, not every elementary school in Misiones has high drop-out rates. Some schools do better.

Consider Mr. García's school. Mr. García is a teacher in a school in Misiones which has higher student retention rates. After school hours, Mr. García can often be seen at his students' home sipping a cup of mate, a local beverage made of herbs. He may ask parents about the well-being of the family pig that appears to be pregnant and about the tobacco harvest: "How much are they selling it for per kilo?" Mr. García may encourage Manuel and Lydia, the parents of Sylvia whom he knows on a first name basis, to continue sending their child to school. "Education is a great equalizer," he emphasizes. "Sylvia is a good student and has a bright future ahead."

The boys and girls in Mr. García's class, as well as their parents, know that Mr. García believes in their potential and will go the extra mile to encourage their continued presence in school, even when they are absent.

In Misiones, teachers like Mr. García are beacons of hope for the Ramóns and Sylvias, who otherwise would not make it past third grade.

DEFIANT WELCOME

"Señor, Argentina no es Vietnam (Sir, Argentina is not Vietnam). Your Positive Deviance approach that may have worked in Vietnam will not work here in Misiones! We, the teachers, haven't been paid in months. The parents of these children who drop-out are worthless and disinterested. And you Señor, you know nothing of our situation or problems," noted a senior female teacher. Other teachers, with

POSITIVE DEVIANCE
makes the invisible visible.

POSITIVE DEVIANCE INQUIRY
allows community members to ask open-ended questions.

crossed arms and defiant looks, nodded in agreement.

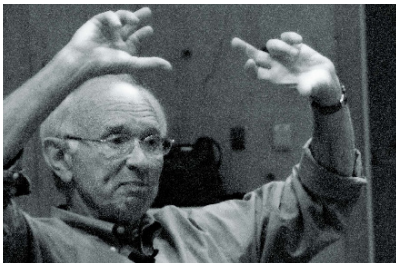


photo: David T Gaiser
Jerry Sternin's characteristic 180° flip

"Señora, lo que usted dice es absolutamente la verdad!" (Madam, what you say is absolutely true), replied Jerry Sternin, co-founder of the Positive Deviance Initiative. "It is also true that some of you, sitting in this room at this very moment, have been able to retain over 85% of your students. So, yes, I know nothing about your situation. But I do know that the solution to your problem already lurks in this room."[2]

After a long pause, an elder teacher noted, "Yes, Señor, that is correct." She added, "but we are so often blamed for student drop-outs by both the parents and school administrators."

"Is that the case every time?" asked Jerry. "At every school?" There was a long pause. Some teachers leaned in. Some appeared to drop their frowns. Some seemed to be smiling.

"PD is not a magic bullet," Jerry noted with humility, "but by looking at elementary schools in Misiones that are able to retain and graduate more students without access to any special resources, we might get somewhere."

More folded arms began to open and Jerry's suggestions received affirmation.

By the time the day ended, the tone of the meeting had changed dramatically. Some participants noted they looked forward to continuing the discussion the next day. "Most surprising of all," noted Jerry, "some teachers asked if they could invite parents of some school-going children." Earlier in the day, the teachers had blamed the parents as being the cause of the "drop-out problem." Now they felt that including parents in this workshop might bring them closer to a solution.

THE 180 DEGREE FLIP

Those who knew Jerry Sternin will tell you about his 180º hand flip, a cue for shifting perspectives: That is, "flip" the problem and focus on the solution.

On the second day of the workshop, 22 parents

joined the meeting. Suspicious of the teachers' invitation, they looked palpably nervous.

"We're not sure what to expect," one parent said. "I don't know what we can contribute," said another.

photo: PDI

PD school selection process

As poor subsistence farmers, parents were not used to being asked for their opinion. Yet as happens in many iterations of the PD approach, the less likely suspects, in this case the parents, were full of ideas and contributions.

The parents were even quicker than the teachers to embrace the 180° flip. They worked intuitively, discussing their own experiences in overcoming hardships to keep their children in school and identifying ways that their neighbors had been able to do the same; thus began the process of self-discovery.

PD RE-FRAMES, PD PARTICIPANTS SELF-DISCOVER

Self-discovery is critical to community ownership of a PD program. It significantly increases the probability of adopting the identified PD strategies. In Alem and San Pedro, two districts in Misiones, self-discovery was introduced to the workshop participants from 10 schools followed by a field-based PD Inquiry.

First, the problem was defined. Workshop participants, comprising parents, teachers, and administrators, agreed on a definition of the problem: "Schools in Alem retain only 56% of students through grade three."

Next, participants agreed on a desired outcome: "Schools in Alem would achieve retention rates of 75% or higher."

Third, the group was charged with determining if Positive Deviant schools existed in Alem. To determine if there were schools with retention rates of 75% or higher, small groups were given a calculator and a list of schools with data on the number of students enrolled in grades one to three from 1999 to 2001.[3] They would then identify these schools and rank them accordingly.

After calculating retention rates for all 63 schools in Alem district, eight potential PD

Only those strategies accessible to all are kept. The rest are deemed TBU "true but useless."

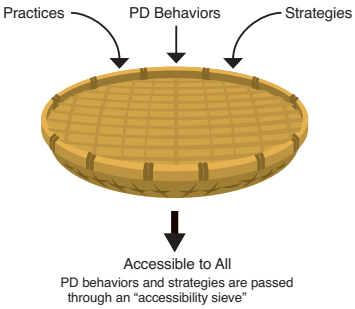
schools with retention rates ranging from 78 to 100% were identified. The identity of these schools was then revealed. The group discussed that two of those schools had access to special resources, and that their strategies might not be accessible to ordinary schools. Through another round of review, six were narrowed as being PD schools. These schools had high retention rates but were otherwise identical to other schools in the area.

Fourth, the teacher-parent teams set out to discover uncommon practices by visiting the six PD schools. The first day they carried out in-depth interviews with teachers and administrators, and observed classes in session. Parent participants also interviewed parents from PD schools at their homes. The teams were to make general observations regarding the use of physical facilities, food distribution, and condition and utilization of school materials.

The process of self-discovery is not just about looking at what is going right. For example, several groups reported that "teachers in the PD schools showed unusual respect for their students," rather than identifying the specific uncommon behaviors and strategies through which that respect was enacted. It took a second trip to the school for the group to see the usefulness of identifying specific, verifiable practices that led to good outcomes.

Only when Jerry Sternin challenged the logical conclusion of that perception was the group willing to dig deeper.
Jerry asked: "Since all schools treat their students with love and respect, can we assume that this issue has no impact on retention levels and that schools with 56% retention rates treat their students in the same manner as those with a 100% retention rate?"

This PD Inquiry process helped the group arrive at a more nuanced description of common practices.



In a PD school, for instance, teachers warmly greeted parents whenever they visited the school. In turn, parents felt comfortable approaching the child's teacher. Teachers also asked parents to RSVP to invitations for meetings, and when parents did not

Area of Impact	Traditional Practices	PD Practices
School - Family Relations	Parents with little or no formal education are not given opportunities to contribute to the educational process.	All parents contribute to the school. Parents hold skills workshops (i.e. sewing, woodworking). They also help maintain the school building (i.e. mend fences) and arrange student games and/or parades.
Teaching Methodology	The whole class is given the same assignment to work on, regardless of ability or age.	The class is broken up into groups. Assignments are modified to reflect the abilities of the students in the group.
Degree of Community Involvement	There is little communication between the school and community leaders.	Schools identify community leaders (i.e. priests) and discuss problems with them. Community leaders are actively involved in increasing retention.
Nutrition	Children are provided with one meal at school (lunch).	Schools recognize that hungry children have difficultly learning. Schools provide breakfast instead of lunch.

Table 1 A comparison of traditional and PD practices in elementary schools of Misiones, Argentina

RSVP, teachers went out of their way to contact them.

The PD Inquiry yielded identification of uncommon practices in the way teachers and parents interacted with students, in the way classes were taught and assessed, in how the community was involved, and how children's nutrition schedule was constructed (See Table 1).

Upon conclusion of the PD school visits, and identification of uncommon PD practices in schools with high retention rates, an action plan was developed by parents, teachers, and administrators. The final workshop before implementation of the PD intervention closed with a very different tune:

"We have become deviants!" noted a Misiones school headmaster.

Next, the six schools developed an initiative building upon the foundation of identified PD practices and actionable solutions. Some PD behaviors were implemented immediately.

Beginning the following week, teachers and parents identified absentee children and visited their homes to discuss their absence with their parents.

POSITIVE DEVIANCE
is a practice-based approach that yields immediate, actionable results.

photo: PDI

Engaged students in an elementary school in Misiones

Students and their parents made "commitment posters" at home on which parents detailed the commitment they would make to improve the quality of education of their children. Imagine a school of more than 550 students "papered" with these posters!

SMALL RIPPLES, BIG CHANGE!

Small actionable practices, blowing candles, singing happy birthday, and cutting cake, can make a big difference. In the case of Misiones, it helped ensure that the birthdays of Ramón, Paola, Vicente, Sylvia, and others stayed on the wall for years to come.

A parent aptly summarized the Misiones experience with school retention: "Even though I have little schooling, the PD practices are something I can take home. I can also show them to my neighbors so they can better support their children. I feel empowered that I can get closer to the teacher to make it better for my children."

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[1]Dabas, E. and Yanco D. (2003). *Enfoque de desviación positiva en el ámbito educativo: Misiones, Argentina*, 2002-2003. Unpublished report prepared for the World Bank.

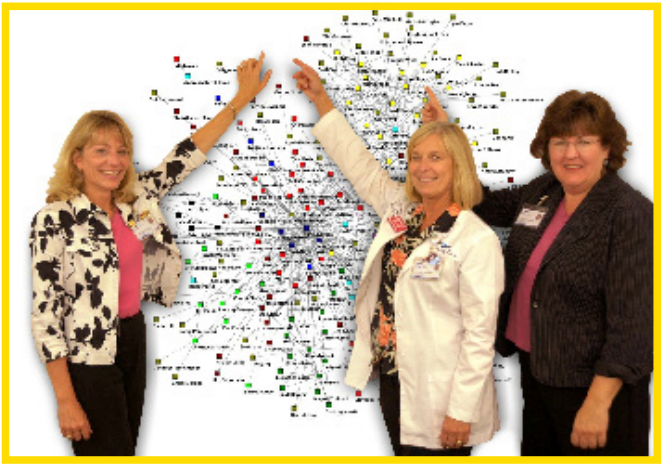
[2]Sternin, J. (2003). *Positive Deviance (PD) Student Retention and Educational Enhancement Program*. Unpublished report. Buenos Aires, Argentina: World Bank.

[3]Schools were classified by number, not by name so that selection was based solely on data rather than perception of performance.

Saving Lives by Changing Relationships

Positive Deviance for MRSA Control and Prevention in a U.S. Hospital[1]

by Arvind Singhal, Prucia Buscell, & Keith McCandless



On average, hospital acquired infections (HAIs) kill about 275 patients in U.S. hospitals a day, largely because hand hygiene, gowning, and gloving protocols are not stringently followed. HAIs are 100% preventable.

What if a jumbo-jet crashed and killed 275 people each day because the pilots were too busy to complete all pre-flight checks and, four times out of ten, in a hurry to take-off?

A tragedy of such appalling magnitude unfolds itself daily in U.S. hospitals. On average, hospital acquired infections (HAIs) kill about 275 patients in U.S. hospitals a day. This is largely because their doctors, nurses, therapists, ambulance drivers, and other health care workers did not follow hand hygiene protocols, were too busy to properly gown and glove, or were, simply, in a hurry.

A leading bacterial source of HAIs is Methicillin Resistant Staphylococcus Aureus (MRSA), a deadly pathogen resistant to most commonly-used antibiotics, that can live up to six weeks on environmental surfaces and transmits easily through contact. MRSA infections have increased 32-fold in the U.S. in the past three decades.

Amidst this alarming reality, a handful of U.S. hospitals have shown sharp declines in MRSA infections. At Billings Clinic, a multi-specialty physician practice in Billings, Montana, healthcare-associated MRSA infections have dropped by a whopping 84% in the past 2.5 half years. What is Billings Clinic doing differently?

As opposed to the traditional approach of focusing on what does not work, and rewarding or punishing employees to practice safety, Billings Clinic's approach to MRSA prevention focuses on what works, believing that among its vast pool of employees, doctors, nursing staff, housekeepers, therapists, technicians, pastors, and social workers, there are individuals who practice certain simple yet uncommon behaviors that prevent MRSA transmission. For instance:

- A physician purposely sees his MRSA patients last during rounds, a simple practice that greatly reduces the risk of transmitting MRSA.
- An ICU nurse disinfects a patient's side rails several times during her shift to keep MRSA from being picked up and spread.

Billings Clinic's approach to MRSA prevention focuses on identifying what already works, and then on finding a way to amplify that practice.

- A nurse places a clean sheet between herself and a MRSA patient to avoid direct microbial transfer.

- A physician stops wearing his tie, his white coat, and long sleeves, all vectors for the spread of MRSA infections. Many others adopt his practice.

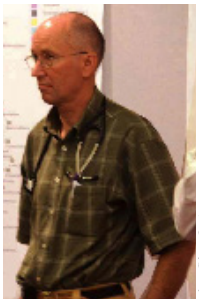


photo: Plexus Institute

Doctor Fairfax in short sleeves

These individuals, and dozens of others like them, at Billings Clinic are Positive Deviants. They are "Deviants" because their behaviors are not the norm and "Positive" as they model the desirable MRSA-prevention behaviors. As more people discover how to practice safety, the norm across the institution begins to shift.

TRACKING INTRACTABLE BEHAVIORAL PROBLEMS

In the summer of 2004, Billings Clinic CEO Nick Wolter, MD attended a workshop in Durham, NH, where Jerry Sternin, co-founder of the Positive Deviance Initiative at Tufts University, made an impromptu 15 minute presentation on the topic. Sternin emphasized that the Positive Deviance (PD) approach was especially suited to address intractable social and behavioral problems.

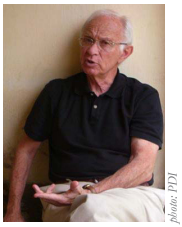


photo: PDI

Jerry Sternin

Following basic hand hygiene protocols, Wolter knew, was an intractable behavioral problem in U.S. hospitals, including his own. Adherence to hand hygiene protocols for every patient encounter in U.S. hospitals ranged from 29 to 48 percent. This meant that, more than likely, the interaction between a health care worker and a patient carried the risk of infection transfer. This figure was highly problematic as patients expect hospitals to be safe environments, not transmission vectors of deadly pathogens.

As a physician, Wolter knew that if he washed his hands before examining a patient, it would be cumbersome to wash them again just because he answered his pager during the process. When one's

THE POSITIVE DEVIANCE approach values the wisdom of "unusual suspects," or those who may otherwise be overlooked.

Non-adherence to hand hygiene and gowning and gloving procedures was a behavioral problem, but it was treated as a technical one.

hands feel clean, the behavioral tendency is to resume interrupted work, not fully grasping the implications for infection transfer.

MRSA is a 100 percent preventable infection. If hand hygiene, gloving, and gowning protocols were meticulously followed by all, the rates of MRSA transmission would drop. However, rates were rising in spite of widely-held knowledge, positive attitudes, and behavioral intention to follow the correct infection control procedures. Surprisingly, MDs, especially surgeons, were the worst offenders. Non-adherence to hand hygiene and gowning and gloving procedures was more a behavioral problem, and less a technical one.

photo: Plexus Institute

New routine: scrubbing equipment

Intrigued by the PD approach's potential to combat a behavioral problem, and the belief that small changes can make a big difference in line with complexity science principles, Wolter and Nancy Iversen, Billings' Director of Patient Safety and Infection Control, championed the Clinic's participation as one of the six beta sitehospitals for a MRSA Prevention Partnership, led by Plexus Institute. Plexus Institute is a small nonprofit that fosters the health of individuals, organizations, and communities by helping people use the principles of complexity science. In 2006, these beta sites agreed to tackle MRSA as a behavioral and social problem using PD, an approach compatible with complexity science concepts. Monique Sternin, co-founder of the Positive Deviance Initiative, and Keith McCandless were assigned by Plexus Institute to serve as Billings' PD coaches. Joelle Everett joined the coaching team some months later.

Two and a half years later, MRSA infections, house-wide, dropped steeply, by 84% as did infections from other antibiotic resistant bacteria.

ACTING ONE'S WAY

Billings' MRSA prevention activities got off to a slow and turbulent start. There were moments of skepticism, anxiety, and uncertainty, laced with negotiations, debates, and many conversations. False starts and doubts held hands with small triumphs and joys. Early changes were subtle yet powerful.

Iversen and her team championed the PD efforts at Billings, knowing Wolter was supportive. She recalled their biggest challenge: "How to create experiences where our people could

learn for themselves, discover solutions, and have a safe place to practice."

PD coach McCandless suggested "Guerilla Theater" or Improvisational Theater (commonly referred to as "improv").

"Theater in a hospital?" skeptics scoffed at the idea.

Chocolate pudding:
Making MRSA visible

photo: Plexus Institute

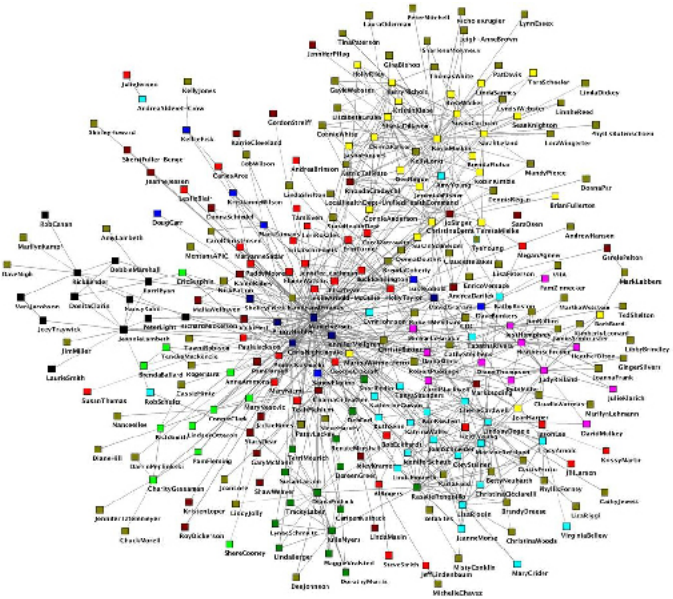
Iversen and her team persisted. Casting calls were made, actors recruited, and some 50 improv sessions were conducted in 2007, involving over 500 Billings Clinic frontline staff in the battle against MRSA. Another improvfest happened in 2008, building on the success of the first one. Improv scenarios explored practical matters such as how to transport an infected patient within the hospital, how to deal with rehab patients who are not exclusively room-bound, how to speak truth to those in powerful positions, and how to wear and dispose protective gear safely.

In one session, several nurses and others talked about their solutions for taking food trays out of rooms for MRSA patients in isolation. Some suggested the use of disposable food trays. One employee retorted: "If you want patients to feel unwanted, like pariahs, give them a cardboard tray with cold food." Other ideas were brainstormed until a simple solution emerged. The nurse wipes the bottom and edges of the tray with an anti-bacterial wipe and hands it to someone outside the room. In another improv session, a physician, while examining a patient's leg wound that was oozing brown goo, paused to shake hands with the patient's family, back-patted a nurse, touched some objects, and resumed the examination. Within seconds, the patient's body, the bedding, the hands and clothes of the doctor, the nurse, and the patient's family showed brown stains. The brown goo, chocolate pudding, substituted for MRSA, making visible how the invisible, bacteria spreads.

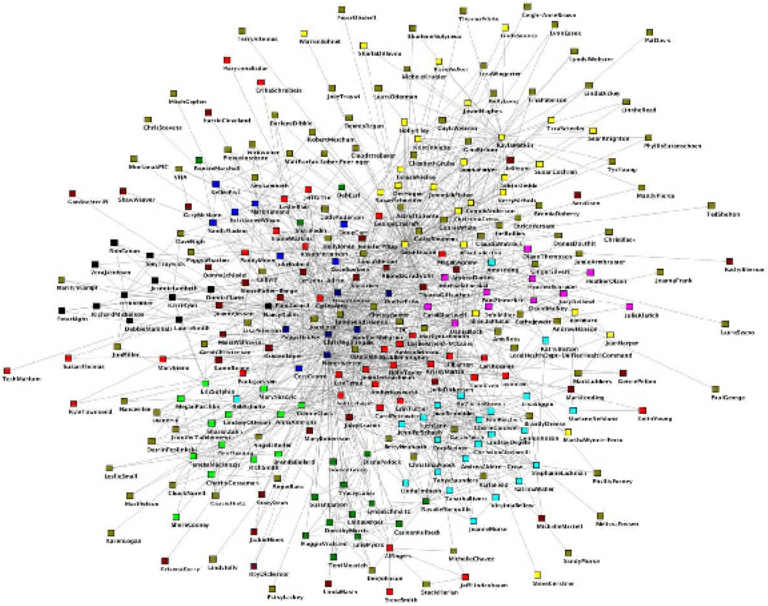
Improv participants, front-line workers from multiple units, emphasized that the improvs were a fun and refreshing way of learning. It was not another lecture, or a briefing. The scenes provided continuous "aha" moments.

Carlos Arce, Director of Organizational and Leadership Development at Billings Clinic reflected on the improvs: "Improvs and Positive

THE POSITIVE DEVIANCE
and improvs go hand-in-glove. Both are about "acting one's way into a new way of thinking."



Baseline social network map before PD was implemented



Collaboration social network map 18 months after PD was implemented

Network mapping at Billings Clinic helped identify "unusual suspects," whose influence could then be tapped.

Deviance go hand-in-glove, improvs are about 'acting one's way into a new way of thinking.' Improvs provide a safe space where the unspoken could be spoken, where the un-shown could be shown. The stage is a space of experimentation, with no sharp edges."

PREVENTING INFECTIONS BY CHANGING RELATIONSHIPS

"What explains the recent drops in MRSA infections at Billings?" we ask Wolter. His response, "Infections are being prevented at Billings Clinic by changing relationships." What? Lives are being saved in a hospital by changing relationships? Giant posters visually displayed the changing nature of relationships among the 300 Billings employee survey participants. A baseline plot of interactional relationships in 2006 was placed alongside one from 2008 (see the left page).

Even to an untrained eye it was apparent that more people were having more conversations about MRSA prevention and control within units, and more cross-unit collaborations were occurring to fight MRSA. Indeed, lives were being saved at Billings Clinic by changing the nature of relationships.

In studying the maps with her team, Iversen found several "unlikely suspects," people who were highly connected with others and served as a resource, but who were not previously recognized as leaders.

One, for instance, was Sarah Leland, a young oncology nurse who emerged as a "go to person." This knowledge allowed Clinic staff to identify people they should "especially support, draw more into the MRSA prevention initiative, and tap for influence."

PD IS BATHED IN DATA

PD processes at Billings Clinic were bathed in, and guided by, a constant stream of data gathering, analysis, and action. In Fall 2006, when the MRSA prevention initiative was launched, a baseline on MRSA prevalence was carried out. Piloting units made a commitment to active surveillance which meant that every patient was screened with a nasal swab on admission, transfer, and discharge. Hand hygiene and adherence to other infection control protocols were tracked and recorded, and supplies, purchases and usage documented.

The data were available for all to see, and participating units displayed infection rates in colorful graphs, a scorecard of their progress. The hand hygiene data were collected through anonymous observation, and then the staff in each unit received a graph documenting their observed performance. In essence, self and peer-regulation of hand hygiene procedures, substantiated with feedback data, was encouraged.

The feed forward and feedback loops associated with the regularly collected MRSA data have increased staff involvement, noted Iversen:

When data allows people to see the difference their actions are making, it acts as a self and collective motivator.

"When they see the data they see the difference their actions make."

CULTURAL CHANGE

Many at Billings Clinic believe that the introduction of the PD approach has engendered a slow but palpable cultural transformation within the organization.

Mark Rumans, a senior medical doctor, narrated an experience: "A few months ago, I went into a MRSA room, not having seen the isolation sign. I had not gowned and gloved. After coming out of the room, I realized my mistake. I apologized to the nurse, telling her how I missed the isolation sign."

Added Iversen: "The conversation between Dr. Rumans and the nurse led to the re-design of the isolation sign. It was now placed where it could not be missed."

A year or two ago, a senior doctor would have been highly unlikely to so readily apologize to a nurse, and not enough goodwill would have been present for an ensuing conversation that would help fix the problem.

If this isn't a cultural transformation, then what is?

The ways in which a PD intervention changes the nature of discussions is remarkable. Of all PD changes that might happen, discussions are the most difficult to document because they incorporate themselves almost invisibly to the fabric of a community. Change can be so subtle that it is only over time, that people become mindful of and attentive to shifting norms.

Billings Clinic in Montana shows us how patients' lives can be saved by sharing, and acting on, the inherent wisdom that already exists with its frontline staff.

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[1]For more please see (1) Arvind Singhal and Prucia Buscell (2009). *From Invisible to Visible: Learning to See and Stop MRSA at Billings Clinic, Billings, Montana*. Plexus Institute.

Sunflowers Reaching for the Sun

Positive Deviance for Child Protection in Uganda[1]

by Arvind Singhal & Lucía Durá

POSITIVE DEVIANCE is an approach that is uniquely effective in addressing intractable and highly complex social problems. What could be more complex than the reintegration of unwelcome abductees like Cecilia?

"When you're given to an LRA (Lord's Resistance Army) commander, you are his forced wife. You are expected to take care of all his needs. Everything! I returned from the bush a few days ago but am still haunted by frightful dreams. I hear children crying. We are being attacked, or fighting, walking for days in the hot desert without food or water."

"I'm happy to be back, but I have no hope of returning to school. I don't know what the future holds for me."

- Cecilia, a returned abductee in Northern Uganda[2]

Seventeen-year old Cecilia, abducted from her home in Gulu district of Northern Uganda and held in captivity for five years, is one of the lucky survivors of the brutal civil conflict that has ravaged the Northern Ugandan landscape since 1986.

For over two decades, the Lord's Resistance Army (LRA), in the name of the local Acholi people, has engaged in guerrilla warfare against the Ugandan government, avowing to establish a theocratic state based on the Ten Commandments. The conflict has claimed tens of thousands of innocent lives, displaced over a million people, and led to the abduction and enslavement of over 50,000 children, including the likes of Cecilia. Accused of widespread human rights violations, the LRA's crimes against humanity include murder, abduction, mutilation, sexual enslavement of women and children, and forced soldiering.
"They (the LRA) take an axe and split your

photo: Lucia Dura and Arvind Singhal

An Internally Displaced Persons (IDP) Camp in Uganda's Pader District where the PD Project for reintegrating young mothers was piloted

head with it. They don't waste any bullets on you," recounted Cecilia.

Instead of being welcomed home, returned abductees like Cecilia are often treated by their community members as pariahs. After all, the abducted children were forced to side with the rebel army, killing and ravaging their own people. Physically scarred and emotionally-traumatized, some returned abductees also bear the burden of mothering an enemy's child: "My eldest is Elma Alimo, meaning 'difficult moment.' I named him that because I was just 13 when I had him," noted Cecilia.

photo: Lucia Dorá and Arvind Singhal

Hélène with her child

Unwelcomed and having no education or skills, many girls like Cecilia resorted to transactional sex, that is, sex in exchange for food, clothing, or even a place to sleep. How might these young vulnerable girls take more control of their lives?

LIFE AFTER THE LRA

In March of 2007, Save the Children launched a pilot project to assist in the empowerment and reintegration process of vulnerable girls in northern Uganda's Pader district using the Positive Deviance approach. The PD project targeted 500 young mothers and vulnerable girl survivors as well as 50 adult mentors who provide community- based guidance, farming and financial advice, and general psychosocial support. One of the participating young mothers in this PD pilot is Hélène, a Positive Deviant among her cohort, whose daily practices led her to not just survive, but rather to thrive.

photo: Lucia Dorá and Arvind Singhal

Hélène's sunflowers

POSITIVE DEVIANCE INQUIRY can help identify people in the community who, without any extra resources, address the problem more effectively.

Anyira, lagam me pekowa, tye botwa…
Girls, the answers to our problems lie within us…

Much like a sunflower reaches toward the sun, Hélène's garden grows nurtured by her dreams and aspirations. In the same soil, with the same amount of water and sunlight, a few sunflowers still find ways to plant their roots more firmly and reach higher. Some tower high over Hélène.

"I mixed all of my seeds, sunflower, cucumber, and others, in one basket and spread them in the field. These plants grow well together. I learned this skill from my father, he was a good farmer. He taught me about intercropping."

What Positive Deviance practices does Hélène engage in?

Picks up extra load of firewood for personal use and for selling
Works collaboratively with her friends to be more efficient in farm work, child care, and buying and selling
Fills an extra jerry-can of water and sells it
Listens to cropping and business advice provided by her aunt, parents, and community elders
Exhibits polite interpersonal behaviors
Works an extra hour or two in the garden each day
Saves money and reinvests in productive enterprises
Grows multiple seasonal crops and sells them
Attends school

POSITIVE DEVIANCE practices must be accessible to all; they are often simple and can be implemented immediately.

Positive Deviance is rooted in the belief that the answers to a community's problems lie in existing local wisdom.

Bed lanyut maber
Be exemplary

The role of local and outside experts in PD is to act as listeners and facilitators. They can facilitate community-wide PD Inquiry, which allows community members to self discover the existing demonstrably successful strategies used by some to solve or prevent a particular problem.

A PD Inquiry can help identify people in the community who, without any extra resources, address the problem more effectively. The idea is to make the PD behaviors visible and actionable so that others can replicate the uncommon but effective practices. Similar to the sunflower plant that sinks its roots deeper to reach higher, Hélène, despite the hardships of abduction, early pregnancy, and motherhood, engages in certain practices which make her a valuable and integrated citizen in her returned community.

Through her PD practices, Hélène presents social proof to her peers that overcoming the odds is possible. If she can do it, so can they. And since Hélène's behaviors are already in action, others can begin immediately, without extra resources.

Tii pi kwoni
Work for your life

Hélène's practice of intercropping produces a healthy harvest. She has access to the same resources as other girls in her community, yet Hélène maximizes her harvest by practicing the wisdom passed down by her father. Her intercropping method is a rich source of local scientific wisdom.

With guidance from Anna, her abayo (aunt and mentor), she will hire others to help with the harvest and will be able to sow more for the next season. From a mentor's perspective, Anna is very proud. As she builds the capacity of children, she builds her own capacity.

In Save the Children's PD program in Northern Uganda, whose purpose is to better reintegrate returned abductees, abayos aunt mentors serve as trusted guardians and advisors of young girls, in keeping with the local Acholi cultural traditions. They make PD practices, such as Hélène's intercropping actions, more visible, enabling wider adoption.


photos: Lydia Dyrd and Arvind Singhal

Some crops are harvested and sold, while others, like g-nuts (peanuts), are stored as "savings" for future use or sale

photo: Lucia Dora and Arvind Singhal

Anna, a mentor, with Hélène

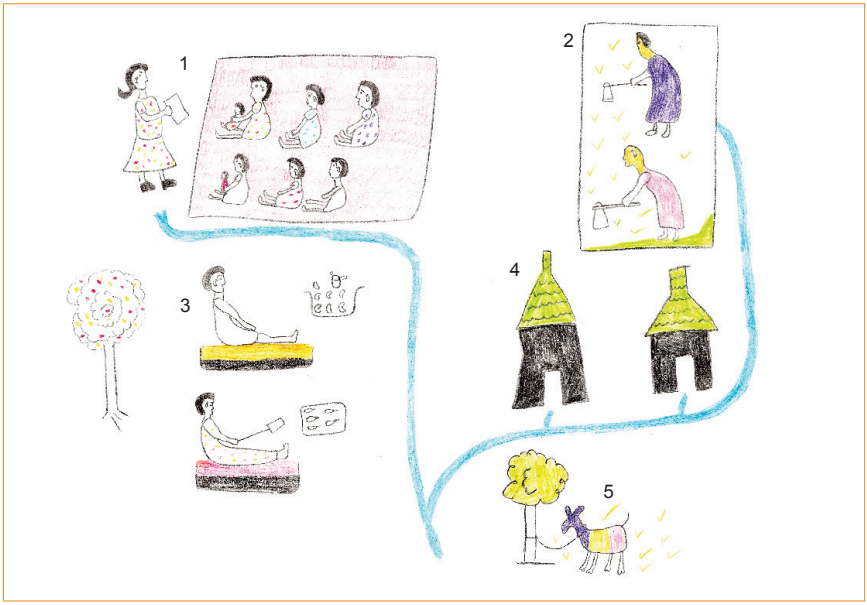
The PD process allows other community members to adopt successful strategies like those of Hélène and other PD individuals. They can work longer, harder, and together; or seek guidance from abayos; or employ intercropping for more bountiful and pest-free harvests.

Program participants who have replicated PD practices successfully call themselves "PD girls."

In this collective sketch made by several "PD girls" in Northern Uganda, we see how they share their knowledge about farming and work together to maximize their time and profits. Pointing at the sketch, one of the girls explained:

"After our capacity-building training with Save the Children #1, we began sharing information about what crops to grow. We worked in the field together #2, and gathered our produce and together sold them in the market #3. We have built our houses #4 and have bought goats together #5 and if they reproduce in good number, we will divide the earnings among ourselves."

Program participants in Northern Uganda who replicated PD practices successfully called themselves “PD girls.”



Sketch drawn by several PD girls explaining five specific PD practices

Edmond, father of one of the “PD girls,” emphasized: “The ‘PD girls’ work in their gardens whenever they can find time. When not in school, they work all through the morning. While most other women return home for other domestic chores or rest, many ‘PD girls’

PD behaviors and strategies are simple, actionable and sustainable, and thus can be easily shared within the community, creating community-wide ripples of change.

photo: Lucia Dura and Arvind Singhal

"PD girls" harvest the fruits of their labor

return back to their gardens in the afternoon or evening." Jane, one of the "PD girls," added: "After finishing work in my garden, I work in my friend's garden. Or I work in another community member's field to earn extra money."
Marie, another "PD girl" noted: "If I dig in a mango garden, I bring back some mangoes to consume or sell."

Grace, a mentor, added: "When they go to fetch firewood, some girls bring back an extra load. One they use for cooking, the other they sell or use the next day. One girl makes extra money by filling up an additional jerry-can of water by the hand pump, strapping it behind her bicycle and delivering it to a construction site."
An evaluation of girls who participated in the PD pilot in Uganda showed:

- 93% of girls engaged in crop growing activities to enhance reintegration and reduce engagement in transactional sex as a means of survival.
- 54% of girls reported savings of above 50,000 shillings after one year.

- 96% of girls reported regaining self-respect by participating in group activities such as debates, songs, and plays.

Sunflowers with firmly planted roots reach for the sun and grow high.

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[1]We thank the following individuals and institutions who helped us in documenting the PD and Child Protection project in Uganda: Anastasia Anthopoulos of Oak Foundation; Lisa Laumann, Dan Rono, and Samoa Pereira of Save the Children USA; Peter Nkhonjera, Tom Cole, Bonita Birungi, and Luc Vanhoorickx of Save the Children, Uganda; and Robert Omara, Paska Aber, Simon Lukone, Jimmy, Beatrice, Raymond, Jennifer, Betty, and Nathan, members of the PD implementing team in Pader district. The project The Life after the LRA: Piloting Positive Deviance with Child Mothers and Vulnerable Girl Survivors in Northern Uganda program was funded by the Oak Foundation, Geneva, and implemented by Save the Children. For more please see Arvind Singhal and Lucia Dura (2009). *Protecting children from exploitation and trafficking: Using the Positive Deviance approach in Uganda and Indonesia*. A publication of Save the Children, Washington D.C.

[2]Cecilia is a pseudonym of a young girl abducted by the LRA who spent several years in captivity. Narratives of returned abductees are available at Irin, a project of the UN Office for the Coordination of Humanitarian Affairs (see www.irinnews.org).

Will Rahima's Firstborn Survive Overwhelming Odds?

Positive Deviance for Maternal and Newborn Care in Pakistan

by Muhammad Shafique, Monique Sternin, & Arvind Singhal

photo: PDI

Young children in Haripur District who beat the overwhelming odds against survival

"The grave opens its mouth for mother and child for 40 days after birth."
--A local proverb

In a remote mountainous community in Haripur District of Pakistan's North West Frontier Province (NWFP), a few dozen miles north of the ruins of the ancient Buddhist educational township of Taxila, 19-year old Rahima felt a sharp, painful twitch in her abdomen. Eight months pregnant, Rahima wondered if the labor pains for her first child had begun--four weeks prematurely!

As the cold wind blew outside her sparse two-room home in Bagra village, Rahima's anxiety climbed steeply, much like the full moon gleaming in the sky. Did the full moon represent a good omen? Rahima would accept any kind of assurance, celestial included, for she knew that of the last eight births in Bagra village, two newborns did not make it past the first 40 days.

Would her firstborn beat the one-in-four odds of survival in this harsh physical environment that had the dubious distinction of harboring one of the highest rates of infant mortality in the world?

The odds for Rahima's firstborn to face pregnancy complications were stacked high. She had received no ante-natal care leading up to her impending delivery, no iron or vitamin supplements, and no tetanus toxoid vaccination. Her workload was heavy, and she tired easily cooking, cleaning, and caring for her in-laws, her husband, and his three younger unmarried brothers.

POSITIVE DEVIANCE
is an approach that is uniquely successful in extremely difficult situations, where perhaps other approaches have failed.

While Rahima's body needed more food and nutrients for the growing fetus, her mother-in-law limited her food portions so that the newborn would not be too big and thus be easily delivered. Rahima's husband, Mushtaq, a small-time subsistence wheat farmer, was looking forward to becoming a father, wishing for the birth of a male child who could carry on the family name.

Although a conscientious husband, Mushtaq, like most other husbands in Bagra village, was not involved in his wife's pregnancy and ante-natal care. His preoccupation were his wheat fields and providing for the extended family. Mushtaq had no cash savings and made no preparation for any emergencies or pregnancy-related complications for Rahima. As per Bagra's social norms, pregnancy, delivery, and child care were exclusively in the women's domain. Mushtaq's mother, Shakila Bano, who with her experience of birthing 13 children (10 of whom survived), was Rahima's primary resource for maternal and newborn care.

With the midnight hour approaching and blistery mountainous winds howling, calling the *dai*, the traditional birth attendant, from a neighboring village was not possible. Shakila would help Rahima deliver the baby with the help of a neighboring aunt. Knowing the messiness of delivering a baby, Shakila spread some jute bags on the cold floor of the animal shed where Rahima would squat holding on to a *charpoy*, a four legged bed, for support. Writhing in pain, Rahima pushed and pushed until her firstborn—a daughter—was delivered.

Shakila sawed the umbilical cord with a bamboo stick and tied a traditional thread around it to stop the bleeding. A dressing of *desi ghee* (clarified butter) was applied to keep the cord moist and lubricated. The aunt laid the premature newborn girl on the cold floor as Shakila delivered Rahima's placenta.

Mushtaq brought in a bucket of tepid water heated in haste over a wood stove and the aunt bathed the shivering newborn in an attempt to remove the vermix. The baby was then wrapped in a rag blanket and handed to Shakila so she could administer the child *gutti*, a homemade pre-lacteal concoction made from green tea, buffalo milk, *ghee*, and sugar.

The prevailing belief is that the person who administers the *gutti* transfers their characteristics (intelligence, disposition, or charm) to the newborn. The thick colostrum, *keer*, flowing out of Rahima's breasts, full of antibodies to boost a newborn's immunity, was discarded, deemed unfit for the newborn's consumption. For the first hours, the *gutti* would suffice.

POSITIVE DEVIANTS ARE INDIVIDUALS or groups who find solutions to problems through local wisdom, without access to special resources.

With the newborn washed, wrapped, and fed, Mushtaq's father, the elder male, was summoned to whisper *azan*, a prayer from the Holy Quran, in the newborn's ear on the threshold of the room where Rahima delivered.

Rahima prayed silently that her tiny premature baby girl would survive, if not thrive, against overwhelming odds.

SAVING NEWBORN LIVES

Between January 2001 and October 2004, the Positive Deviance approach was implemented in a phased manner in eight villages of Haripur District in Pakistan's North West Frontier Province to deliver better health outcomes for the likes of Rahimas and their newborns.

Positive Deviance (PD) is based on the observation that in every community there are certain individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers, while having access to the same resources and facing similar or worse challenges. In essence, among the thousands of Rahimas, Shakilas, and Mushtaqs of Haripur District, were there a handful of individuals whose uncommon practices resulted in better health outcomes for the mothers and their newborns?

Initiated by Save the Children as part of their Saving Newborn Lives (SNL) Initiative in Pakistan, the project represented the first application of the PD approach to address maternal and newborn care issues.

Beginning with an experimental PD process in two villages—Bagra and Banda Muneer Khan, followed by a pilot phase in Kaag and Chanjiala villages, where various PD processes, tools, and strategies were further refined, a larger four-village intervention was implemented in Garamthone, Nilorepaeen, Bhaira, and Chambapind villages. Baseline and end-line data were collected in these four interventional villages and in four comparison control villages to rigorously assess the effects of the PD intervention.

IMPLEMENTING THE POSITIVE DEVIANCE APPROACH

"When people come from outside, it does not feel good. But if we see the new things with our eyes, and try them, and see some people practicing them, that definitely has a stronger effect."

—A young mother in Garamthone Village

The use of the PD approach in these eight communities of Haripur District followed an iterative, well-defined process in two phases. In Phase one, activities were initiated to foster **community dialogue** about the problem of

IN THE POSITIVE DEVIANCE APPROACH
change is led by internal change agents who present social proof to their peers.

photo: PDI

Post-partum care role-playing with dolls

newborn mortality and morbidity among community members (separately between male and female groups) in order to identify PD newborns and their families, discover what were their demonstrably successful strategies (through a PD inquiry), and develop a plan of action. Phase two was dedicated to **community action** via community-designed neighborhood activities undertaken by both male and female groups.

The PD process, designed to build strong rapport with the community members, helped the intervention team learn about the local contexts of understanding with respect to maternal and newborn care. For instance, the concept of "newborn" was extended to babies under 40 days to match the cultural mindset in which babies have a special moniker for up to 40 days.

Because in the NWFP of Pakistan, safe motherhood, pregnancy, and delivery are highly taboo subjects, a step by step approach was employed with various participatory activities such as transect walks, focus group discussions, social network maps, newborn mapping, and in-depth interviews. During the community orientation and feedback sessions, facts and figures about newborn and maternal care were shared, including powerful, emotive testimonies from family members who had lost a newborn or a wife, daughter-in-law, or niece during labor and delivery.

A baseline about newborns in the community was established working with both women and men's groups. A newborn mapping activity was conducted by both groups to determine how many babies had been born the year before, how many had been stillborn or died immediately after birth, after 7 days, after 28 days and within 40 days.

Concurrently, explorations of common practices with women's groups around pregnancy, delivery, and immediate and subsequent

post-partum care were explored using stuffed dolls as props. The dolls provided a visual representation of how the newborn was handled during the delivery process and post-delivery.

The PD inquiry was initiated to enable the community to discover the uncommon yet effective behaviors and strategies that lie amidst them, and to develop a plan of action to promote their adoption among community members.

The PD team—composed of village leaders, self-identified volunteers (activists) and the NGO staff—defined a Positive Deviant (*misali kirdar*) newborn, as one who survived against heavy odds because of poverty, prematurity, and maternal health history (e.g. miscarriages, anemia, and/or age of mother).

Besides the newborn, family members related to the newborn were identified as PD persons, such as a father who saved money in case of obstetric emergency at delivery, a mother-in-law who prepared a delivery kit for the arriving newborn, a *dai* who successfully resuscitated newborns who were not breathing and practiced clean cord cutting and appropriate cord care.

The inquiry also helped discern household behaviors that increased the chances of newborn survival, including tetanus toxoidd vaccination and antenatal care for the mother, delivery preparedness on part of mothers-in-law and *dais*, emergency-preparedness on part of husbands, the use of clean surface for delivery, clean hands while delivering, clean cutting of umbilical cord, thermal care of newborns, exclusive breastfeeding, timely care-seeking for

Maternal and Newborn Care Issues	Observable PD Practices
Pregnancy, Delivery, and Immediate Newborn Care	-A pregnant mother went for antenatal consultation and tetanus toxoid injection.
	-A husband asked the *dai*, the traditional birth attendant, to see his wife in her 9th month of pregnancy although she was well.
	-A husband increased the food intake of his wife during pregnancy, especially in the last 2 months.
	-A husband arranged for enough money to hire a transport in case of a delivery emergency.
	-The family hand-stitched a small mattress (*gadeila*) for the baby to have a clean and warm surface immediately following delivery.
	-A husband gave the *dai* a clean blade.
	-A mother-in-law placed clean plastic under the mother for delivery.
	-A husband insisted that nothing be applied on the umbilical cord after it was cut and tied.
Breastfeeding	-A sick and premature baby was exclusively breast-fed with no supplements and no *gutti*.
Nurturing	-A father realized that his newborn son was weak and small, and therefore a special child (*khas batcha*), requiring special care. The baby was kept warm by wrapping and his nappies changed frequently. The child was exclusively breastfed and the quality and quantity of food for the motherwas increased. The mother was made unavailable to the rest of the household so that she could exclusively care for the baby.

Table1. Some Observable Positive Deviance Behavior's Related to Maternal and Newborn Care

POSITIVE DEVIANCE VALUES
the wisdom of ordinary people.

premature or sick babies, paternal involvement in spouse and childcare, increase in postpartum maternal diet, and others.

The PD inquiry also yielded rich insights on messaging strategies used by the *misali kirdars*. For example, a religious leader noted: "we don't need to bathe the baby for *azan* as when we listen to *azan* (a prayer from the Holy Quran) five times a day, we are not clean most of the time, so in the same way newborns need not be bathed before saying *azan* in their ears." This religious leader, and his message about delaying the bathing rituals of a newborn, was then given play in *mohallah* (neighborhood) sessions and in community Healthy Baby Fairs, thus multiplying its effects.

To advocate for paternal involvement in maternal health pre and post delivery, a father noted: "Giving *panjiri*, a nutritionally-rich protein bar, to the pregnant woman can lead to a healthy baby and also keep mother's life out of danger. If we provide food for the mother, it will ensure the health of the baby."

A mother-in-law explained the benefits of exclusive breastfeeding for her daughters-in-law: "The baby has no disease in the mother's womb.

photo: PDI

A mother sharing PD behaviors she practices with other women in the Healthy Baby Fair

If breast milk were dangerous, the baby would become ill in the womb. So mother's milk is safe for the baby because it comes from the mother's body."

Different channels of communication were used to repeat and reinforce the PD messages through different media, including religious and secular leaders and popular, culturally appropriate tools, such as street theatre to validate the messages given by the PD volunteers. However, the PD methodology focuses not just on the message delivery but also creates an enabling environment at the household level by

WHEN POSITIVE DEVIANT
practices are made visible, they are immediately actionable because they are accessible to everyone in the community.

involving husbands, mothers-in-law, the village health committee members, and members of the Village Action Team (VAT), who collectively facilitate and support the process of behavior change.

FROM INQUIRY TO CREATIVE IMPLEMENTATION OF A COMMUNITY-DESIGNED ACTION PLAN

The PD practices that were discovered were openly shared with community members in community-wide meetings, albeit separately, because of cultural mores, with male and female members. Here the community members had an opportunity to discuss the PD behaviors, seeing their relevance, usefulness, and practicality.

Moreover, this community meeting served as a springboard for action and the development of a community led initiative.

The action plan was developed with the consensus of the whole community and displayed in a common social place to ensure transparency of roles and responsibilities to achieve the objectives. This basic plan was further developed or modified by the community-identified activists in the VAT workshop.

The VAT was formed to manage the project and members were asked how they could measure the impact of the initiative (e.g. survival of newborns, adoption of new PD behaviors, lasting change, and others) and **how** they would monitor the progress of the program.

These village health activists developed a six month plan, deciding that in cooperation with the community members, a plethora of activities would be undertaken at the neighborhood level with regular bi-monthly group interaction *mohallah* (neighborhood) sessions.

These meetings were facilitated by local social activists, who volunteered to carry out the community action plan. Each bi-monthly session was focused on a newborn and maternal care topic and highlighted certain specific PD behaviors and strategies that had been discovered during the recent PD inquiries.

One of the fun activities in the male *mohallah* sessions was to set up a mock bazaar where men were asked to buy what they considered a clean delivery kit for pregnant women.

Discussion on each participant's purchase followed and resulted in men declaring, some anonymously, that a new razor blade was the best tool for cutting the umbilical cord.

photo: PDI

An interactive exhibit inviting pregnant mothers to select essential items for a clean delivery kit

The community's respect and open support for the men's contributions and decisions helped enhance their self and collective efficacy, leading to the emergence of a new and innovative leadership.

Scores of new male volunteers signed up to run the *mohallah* sessions. Similarly, in the female *mohallah* sessions, community volunteers set up a bazaar, laying out several objects on a table and asking pregnant mothers, mothers-in-law, and *dais*, to select the five or six objects (e.g. soap bar, clean blade, clean plastic sheet, etc.) that were essential for a clean delivery kit.

The selection of each object, essential or non-essential, sparked a healthy discussion about the object's relevance in delivery preparedness. New leadership emerged from these sessions to serve as volunteers and activists in improving the quality of lives of newborns and their mothers.

MEN TAKE CHARGE

The initial community dialogue in intervention villages unequivocally revealed that male involvement in maternal and newborn care was minimal. In this dominant Pashtun culture of patriarchy, male bonding with infants or caring for one's wife is perceived as not being "manly."

photo: PDI

Male activists in village Banda Muneer Khan engaged in an interactive exercise to strategize their role in saving newborn lives

A popular local folktale emphasizes this norm of paternal-detachment:

"Once upon a time a father who was going for work in another village directed his wife not to pick-up the newborn baby too often and advised her to hold a hen instead. When he came back after a few weeks, he saw that the hen had become weak and the baby was thriving!"

The PD processes employed several interactive games and simulated role plays to help the local Pashtun men to become more involved in the care of their wives and newborn children.

One of the games used to pass on responsibility to the male Village Action team was the balloons-as-newborn game. Men blew air into balloons and floated them over their heads. They were told that newborns are happy and alive as long as they are floating, but if they fall to the ground that means they are sick and may die. So, what could they do individually, as well as collectively, to minimize newborn deaths?

By floating balloons, and keeping them in the air, they were "acting" on their communal, parental and spousal responsibilities: if they stayed together as a team and continue their PD work the newborn would survive and be safe; if they discontinued their collective effort the newborn would be endangered.

The PD project in Haripur District used a variety of interactive exhibits and artifacts to improve delivery preparedness and newborn care. In addition to the objects (e.g. new razor blade, soap bar, etc.) used during the *mohallah* bazaars, a big hit were homemade dolls, filled with rice or sand, and with detachable umbilical cord and placenta.

WHAT MAKES PD DIFFERENT from other approaches is the combined focus on individual behavior change, as well as community and social change.

photo: PDI

In keeping the balloons afloat, men realize their roles as husbands and fathers

These dolls were used to elicit accurate information from female community members on current practices regarding how the cord was cut, how the placenta was delivered, where the newborn is laid down, how the newborn was handled, and how he or she was resuscitated.

The stuffed dolls were used to train female community volunteers in appropriate delivery and post-delivery practices, including the learning of new, improved newborn life saving behaviors. The dolls allowed mothers, mothers-in-law, fathers, and *dais* (the traditional birth attendants) to engage in learning by doing.

EVIDENCE OF OVERCOMING ODDS

"No newborn has died since the project began."

—An elder in Village Garamthone a year after the project began

"We used to treat our women like *paoon ki jooti* (flip flops). Now we recognize their dignity and treat them with respect."

—An elder in an intervention village

It is useful to highlight that, in contrast to adopting the relatively simple behavior of using a new blade for cord cutting, the delayed bathing of a newborn represents a far more complex behavioral change, given its religious and cultural significance. Post-delivery bathing of a newborn is undertaken in most communities of Haripur District within minutes of delivery; an *azan* (a Quranic prayer) is whispered by a male elder in the ear of the newborn, and the child needs to be "clean" for this purpose. However, early bathing causes hypothermia—a major killer of newborns.

The PD approach also helped in changing

THE PD APPROACH VALUES monitoring and evaluation as integral components of project design.

THE POSITIVE DEVIANCE APPROACH
has proven to be effective through strong evidence.

A pre-post, interventional control research design pointed to significant gains in maternal and newborn care indicators. In comparison to control villages where the gains were insignificant, in the intervention villages:

+ the percentage of mothers giving home made pre-lactal feeds in the first 3 days decreased significantly from 70% to 25%	**+ the percentage of pregnant mothers visiting ante natal clinics increased significantly from 45% to 63%**
+ the percentage of newborns whose cords did not receive unhygenic homemade remedies increased significantly from 7% to 19%	**+ the percentage of fathers who saved money and arranged for transport to tackle pregancy emergencies increased significantly from 45% to 62%**
+ the percentage of families that used a new blade to cut the baby's cord increased significantly from 19% to 33%	**+ the percentage of families that delayed bathing the newborn for the first 24 hours increased significantly from 18% to 32%**

photo: PD1

Male elders participating actively in a *mohallah* session

certain social norms in the intervention villages. In the North West Frontier Province, a highly conservative part of Pakistan, communication about maternal and newborn health is virtually absent. Infant and maternal mortality arecouched in fatalistic terms—"as God's will." Women, by tradition, are not allowed to participate in health education meetings. However, the introduction of the PD approach, which began by building trust with the community's male elders, led to more open household, neighborhood, and community discussions on such "taboo" topics between men and women. The Positive Deviants identified by the community (mothers, mothers-in-law, *dais*, husbands, religious leaders, and others) found a forum to advocate their uncommon yet effective behavioral practices at community levels.

The odds of survival for the yet-to-be-born in Rahima's village have gone up significantly since the PD approach to maternal and newborn care was implemented.

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[1]This case draws upon: (1) Monique Sternin (2001). *Report on the Use of the Positive Deviance Approach In Neonatal Care in Pakistan.* Islamabad: Save the Children, (2) *Positive Deviance: A Strength Based Approach to Behavior Change and Social Mobilization* (2005). Islamabad: Save the Children, and (3) Monique Sternin (2005). *Qualitative Evaluation Report of the Positive Deviance Maternal and Newborn Care Project in Haripur District. Saving Newborn Lives (SNL) Initiative.* Islamabad: Save the Children.

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