

Chapter 10

The Positive Deviance Approach to Designing and Implementing Health Communication Interventions¹

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*“We dance round in a ring and suppose,
But the Secret sits in the middle and knows.”*

—Robert Frost (1942)

During the summer of 2012, in collaboration with a dozen field researchers², I was privileged to be engaged in a novel type of formative research in the urban slums of New Delhi, India’s capital city. Our purpose was to provide inputs to the design of a mass media health campaign to promote small family size, emphasizing delay of first child and spacing between children, focusing attention on women’s and newborn child health, countering the preference for male children, and encouraging adoption of a wide range of contraceptive methods. As opposed to asking the customary deficit-based questions that guide formative research, i.e., *what are the KAP (knowledge-attitude-practice-gaps) gaps related to small family size?, what are the unmet needs of the community?*, our fieldwork instead was guided by asset-based questions: *what is working in the community with respect to small family size and with those who face the highest odds?, were there individuals,*

1 The present chapter draws upon the present author’s work with the PD approach (Singhal, 2013; Singhal & Dura, 2009; 2012; Singhal, Buscell, & Lindberg, 2010). I am grateful to Jerry and Monique Sternin, Dr. Curt Lindberg, Prucia Buscell, Mark Munger, Muhammad Shafique, Randa Wilkinson, Dr. Lucia Dura, and other collaborators for their invaluable and collaborative inputs to my understanding of the PD approach.

2 A personal thanks to my research collaborators and colleagues at the University of Texas at El Paso (Anu Sachdev), Lady Irwin College (Dr. Sarita Anand), Institute of Home Economics (Ms. Yuki Azaad Tomar and Neeti Vaid), Mudra Institute of Communication Arts (Dr. Saumya Pant), and their dozens of alumna and current students, who participated in the India-based fieldwork utilizing PD sensibilities.

couples, and health workers who had found better solutions to problems than their peers without access to any extra resources?

Our formative research fieldwork yielded rich insights. For instance,

- We met a mother of two young girls, who effectively countered her mother-in-law's persistent desire for a male family heir by politely saying: "*We had asked Mother Goddess to bless us with girls. Now that we have two, we owe it to her to take good care of them.*"

While most young mothers in rural India would give in to their mother-in-law's wishes, our respondent had found an effective counter-argument to limit her family to only two girls.

- We met a woman who had significantly reduced her risk of getting pregnant by keeping a close track of her menstrual cycle, avoiding sex during the days she was at highest-risk for conception. During these *na na din* ("no, no days"), she employed a variety of *bahanas* (excuses) to avoid intercourse with her husband. She would, for instance, tell her husband that "I am keeping a *vrat* [fast] for a few days for your health," or "I am not feeling well these days." On her "yes, yes days," when she not at high risk for conceiving, she noted: "I go out of my way to please him."

While most married women in rural India would not be in a position to negotiate sex with their husbands, our respondent had found creative, culturally appropriate strategies to reduce her risk for conception. After all, how could an Indian husband overrule his wife's sacred *vrat*?

- We met a health worker who employed certain uncommon practices that yielded high rates of male vasectomy. When he organized vasectomy camps in rural areas, several men who previously had agreed to have their tubes snipped, either did not show up on the appointed day, or were hesitant to be the first to undergo the procedure. Their dilly-dallying negatively impacted other participants' motivations, and many of the assembled men would dissipate, much to the chagrin of camp organizers. To overcome this problem, our health worker arranged for a few men, who were eager to undergo the vasectomy, to stride up—in open view of other men—and demand that they be the first to be snipped. And, after they had undergone their vasectomy, usually a quick and painless procedure, they would stride out with *musteid chaal* (a stallion's stride), boasting about how easy the whole thing was. Such creative orchestration of theatrical elements helped reduce the anxiety of other men, significantly boosting rates of adoption of vasectomy.

While most health workers would shrug their shoulders and embrace disappointment, our respondent found a creative way to reduce the anxiety of vasectomy prospects, i.e., presenting other men as “social proof” that there was no cause for worry.

What is most intriguing about the behavioral practices of our respondents—i.e., the invocation of Mother Goddess, the fasting strategy to forego sex, and the theatrical manifestation of “social proof”—is that they do not represent normative actions. Among their peer group, our respondents are outliers, their behaviors highly uncommon but highly effective in delivering desirable (positive) outcomes. These individuals represent what we call “positive deviants,” and the (micro) behaviors they engage in are positive deviant (PD) practices.

As formative research processes for health interventions tend to be guided by needs, gaps, and deficit assessments, scholars and practitioners are rendered blind to community assets—i.e., what has been working within the community, working against all odds, and without access to any extra resources. In the present chapter, we analyze the Positive Deviance (PD) approach to social, organizational, and behavior change, arguing that often the solutions to intractable health problems lie hidden within the community. We begin by defining the positive deviance approach and then we analyze the application of PD to address *two* highly complex problems in two different settings: (1) combating malnutrition in Vietnam, and (2) reducing maternal and newborn mortality in Pakistan. We conclude by discussing the implications that the Positive Deviance (PD) approach holds for scholars and practitioners of health communication.

The Positive Deviance Approach

The *Positive Deviance* (PD) approach is based on the premise 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 facing worse challenges and having access to the same resources. However, these people are ordinarily invisible to others in the community. The PD approach to social change enables communities to self-discover the positively deviant behaviors amidst them, and then find ways to act on them, and amplify them (Pascale, Sternin, & Sternin, 2010; Shafique, Sternin, & Singhal, 2010; Singhal, 2013; Singhal, Buscell, & Lindberg,

2010; Singhal & Dura, 2012; Singhal, Sternin, & Dura, 2009).

Positive Deviance to Reduce Malnutrition in Vietnam³

In 1990, Save the Children (USA) sent Jerry Sternin to Hanoi, Vietnam, to implement a large-scale program to combat childhood malnutrition. At that time, two-thirds of all Vietnamese children under the age of five were malnourished. The Vietnamese government had learned that results achieved by traditional supplemental feeding programs were not sustainable. Jerry Sternin, who was accompanied by his wife Monique Sternin, were challenged to come up with an approach that enabled the community, without much outside help, to take control of children's nutritional status.

As traditional methods of combating malnutrition do not yield quick and sustainable results, the Sternins wondered if the concept of positive deviance, developed a few years previously by Tufts University nutrition professor Marian Zeitlin might hold promise (Zeitlin, Ghassemi, & Mansour, 1990). While the concept of positive deviance was first broached in the nutritional literature in the 1960s, Zeitlin expanded the idea in the 1980s as she tried to understand why some children in poor households, without access to any special resources, were better nourished than others. Might combating malnutrition be helped by taking an assets-based approach? That is, focusing on what's going wrong in a community, and finding ways to amplify it?

Positive deviance sounded good in theory but the Sternins had no blueprints to launch a large-scale nutrition program. Where to begin? As childhood malnutrition rates were high in Quong Xuong District in Thanh Hoa Province, south of Hanoi, they decided to begin there. Four village communities were selected for a nutrition baseline survey. Health volunteers weighed some 2,000 children under the age of three in four villages. Their locations were mapped and a growth card for each child, with a plot of his/her age and weight, was compiled. Some 64% of the weighed children were found to be malnourished.

The Sternins then asked the question to determine whether or not there were any positive deviants, i.e., *are there any well-nourished children who come from very, very poor families?* The response: Yes, indeed, there are some children from very poor families who are healthy! Poor families in Thanh Hoa that had managed to avoid malnutrition without access to any special resources would represent the positive deviants—"positive" because

3 See Singhal, Sternin, and Dura (2009) and Singhal and Dura (2012).

their children were well nourished, and “deviants” because they were doing some things differently.

The next logical question was: *What were these PD families doing that others were not?* To answer this question, community members visited six of the poorest families with well-nourished children in each of the four villages. The discovery process yielded the following key PD practices:

- Family members collected tiny shrimps and crabs from paddy fields and added them to their children’s meals. These foods are rich in protein and minerals.
- Family members added greens of sweet potato plants to their children’s meals. These greens are rich in essential micronutrients.
- Interestingly, these foods were accessible to everyone, but most community members believed they were inappropriate for young children. Further,
- PD mothers were feeding their children smaller meals three to four times a day, rather than the two big customary twice a day; and
- PD mothers were actively feeding their children, rather than placing food in front of them, making sure there was no food wasted.
- PD mothers washed their children’s hands prior to meal time.

(Picture 1. Community members mapping the nutritional status of children in their communities. Source: PDI, used with permission)



With best practices discovered, a campaign to tell the people what to do was organized, employing household visits, attractive posters, informational and educational sessions, among others. However, in spite of some modest adoption of these best practices, most of the poor households in Quong Xuong District did not adopt them. There was resistance to best practices. The Sternins, local health volunteers, and community leaders wondered how to get around it. One evening as the discussion was winding down, a skeptical village elder observed: “A thousand hearings isn’t worth one seeing, and a thousand seeing isn’t worth one doing.” What the elder was saying was could a nutrition program be designed that emphasized *doing* more than *seeing* or *hearing*?

(Picture 2. Jerry Sternin (left) with mothers involved in the PD malnutrition project. Source: PDI, used with permission)



In the next few weeks, a two-week nutrition program was designed in each of the four intervention villages. Mothers whose children were malnourished were asked to forage for shrimps, crabs, and sweet potato greens. The focus was on action, picking up the shrimps and crabs, and shoots from sweet potato fields. In the company of positive deviants, mothers of malnour-

ished children learned how to cook new recipes using the foraged ingredients. Again, the emphasis was on doing. Before these mothers fed their children, they weighed them, and plotted the data points on their growth chart. The children's hands were washed, and the mothers actively fed the children. No food was wasted. Some mothers noted their children seemed to eat more in the company of other children. When returning home, mothers were encouraged to give their children three or four small meals a day instead of the traditional two meals.

Such feeding and monitoring continued for two weeks. Mothers could visibly see their 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 PD communities. Over the next several years, the PD intervention became a nationwide program in Vietnam, helping over 2.2 million people, including over 500,000 children improve their nutritional status. A later study showed successive generations of impoverished Vietnamese children in the program villages were well-nourished (Mackintosh, Marsh, & Schroeder, 2002).

This pioneering experience in Vietnam paved the way for other PD applications to follow. Skeptics argued that PD may have worked in the field of nutrition as it was a non-contentious issue. After all, who would not want their children to be healthy? Further, with nutrition, programmatic ideas were easily triable, and the results observable. Could the PD approach be applied to a highly intractable problem where the topic was highly sensitive, deeply ingrained in traditional structures of patriarchy and gender roles, and where prevailing beliefs and behaviors were closely connected to the harsh physical and social environment? The PD experience in Pakistan helped answer these questions.

Reducing Maternal and Newborn Mortality in Pakistan⁴

Between 2001 and 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 reduce maternal and newborn mortality. Initiated by Save the Children as part of their Saving Newborn Lives (SNL) Initiative in Pakistan, the PD process was first introduced in two experimental villages—Bagra and Banda Muneer Khan, followed by a pilot phase in Kaag and Chanjiala villages, where various PD processes, tools, and strategies

4 See Shafique, Sternin, and Singhal (2010) and Singhal and Dura (2012).

were refined. A larger four-village PD 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 assess the effects of the PD intervention (Shafique, Sternin, & Singhal, 2010).

The PD approach was implemented in these eight communities of Hari-pur District in two phases. In Phase One, activities were initiated to foster community dialogue about the problem of newborn mortality and morbidity among community members. These were carried out separately among male and female groups to identify PD newborns and their families, discover what their demonstrably successful strategies were, 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.

Given the highly taboo nature of the PD intervention—i.e., safe motherhood, pregnancy, and delivery—various participatory activities such as transect walks, focus group discussions (FGDs), social network maps, newborn mapping, and in-depth interviews were employed. During the community orientation and feedback sessions, facts and local 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 newborn mapping activity was conducted 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.

Community members were engaged to discover the uncommon yet effective behaviors and strategies to reduce maternal and newborn mortality among 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 history of miscarriages and anemia. 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* (midwife), who successfully resuscitated newborns that were not breathing and practiced appropriate hygiene in cutting the umbilical cord.

(*Picture 3*. Women using dolls to demonstrate common practices around pregnancy, delivery, and immediate and subsequent post-partum care.



Source: PDI, used with permission)

The highly participatory PD inquiry helped discern household behaviors that increased the chances of newborn survival: the administration of tetanus toxoid vaccination and antenatal care for the mother, delivery preparedness on part of mother-in-laws 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 newborn, exclusive breastfeeding, timely care-seeking for premature or sick babies, paternal involvement in spouse and childcare, increase in postpartum maternal diet, and others (Table 1).

The PD Inquiry also yielded rich insights on messaging strategies used by the *misali kirdars* (positive deviants). 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 baby need not to 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.
- A father who strongly advocates for paternal involvement in maternal health pre- and post-delivery, 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. 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.”

Once identified, PD messages were reinforced and repeated through different media, including religious and secular leaders, popular street theater, neighborhood meetings, and other means. However, the PD methodology not only focuses on the message delivery but also creates an enabling environment at the household level by involving husbands, mothers-in-law, the village health committee members, and members of Village Action Team (VAT), who collectively can facilitate and support the process of behavior change.

Table 1. Some Positive Deviance Behaviors Related to Maternal and Newborn Care

Maternal and Newborn Care Issues	Observable PD Practices
Pregnancy, Delivery, and Immediate Newborn Care	<ul style="list-style-type: none"> • A pregnant mother seeks antenatal consultation and tetanus toxoid injection. • A husband asked the <i>dai</i>, 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 to hire a transport in case of a delivery emergency. • The family hand-stitch a small mattress (<i>gadeila</i>) for the baby to have a clean and warm surface immediately following delivery. • A husband gave the <i>dai</i> a clean blade. • A mother-in-law placed a clean plastic under the mother for delivery. • A husband ensured that nothing was applied on the umbilical cord after it was cut and tied.
Breastfeeding	<ul style="list-style-type: none"> • A sick and premature baby was exclusively breast-fed with no supplements and no <i>gutti</i> (a homemade pre-lacteal concoction).
Nurturing	<ul style="list-style-type: none"> • A father realizes that his newborn son is weak and small, and therefore a special child (<i>khas batcha</i>), requiring special care. The baby is kept warm by wrapping and his nappies are changed frequently. The child is exclusively breastfed and the quality and quantity of food for the mother is increased. The mother is made unavailable to the rest of the household so that she can exclusively care for the baby.

The discovered PD practices were openly shared with community members, separately among male and female groups. Community members had an opportunity to discuss the PD behaviors, seeing their relevance, usefulness, and practicality. Village action teams (VATs) 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 *mohalla* (neighborhood) sessions. These meetings were facilitated by local social activists, who volunteered to carry out the community action plan, and endorsed by local religious leaders.

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.

In the male *mohallah* sessions, a mock bazaar was set-up 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. 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. Dozens of new male volunteers signed up to run the *mohallah* sessions initiative, multiplying the reach of the PD intervention.

In the female *mohallah* sessions, community volunteers also 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.

Several interactive games and simulated role plays were employed in the PD process to help the local Pashtun men to become more involved in the care of their wives and newborn children. Initial dialogue with community members had unequivocally revealed that male involvement in maternal and newborn care was perceived as not being "manly." One of the games used to pass on responsibility to the male Village Action team was the balloons-as-newborn game. Men were told that newborns are happy and alive as long as the balloons are afloat, 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 collective communal, parental and spousal responsibilities.

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

(Picture 4. Men blowing balloons to act their way into taking care of their wives and newborns, Source: PDI, used with permission)



- the percentage of pregnant mothers visiting antenatal clinics increased significantly from 45% to 63%
- the percentage of fathers who saved money and arranged for transport to tackle pregnancy 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 newborns whose cords did not receive unhygienic homemade remedies increased significantly from 7% to 19%
- the percentage of mothers giving homemade pre-lactal feeds in the first three days decreased significantly from 70% to 25%
- the percentage of families that bathed the baby after waiting for 24 hours post-birth increased significantly from 18% to 32%

Conclusions

In the present chapter, we drew upon a formative research study in India on family planning, and case studies on combating malnutrition in Vietnam and reducing maternal and newborn mortality in Pakistan, to make the case that often the solutions to intractable health problems reside locally and with ordinary people. This asset-based conceptualization of health interventions is

known as the Positive Deviance (PD) approach—a process of change *that enables communities to discover the wisdom they already have, and finds a way to amplify it*. Over the past two decades, the PD approach has been effectively utilized to address diverse health and social problems such as combating malnutrition in Vietnam and Mali, the eradication of female genital mutilation in Egypt, curbing the trafficking of girls in Indonesia, increasing school and college retention rates in Argentina and the U.S., reducing hospital-acquired infections in the U.S., Canada, and Colombia, and promoting higher levels of condom use among commercial sex workers in Indonesia and Uganda (Pascale, Sternin, & Sternin, 2010; Singhal, Buscell, & Lindberg, 2010; Singhal & Dura, 2009).

The PD approach differs from most of the usual health communication interventions derived from the diffusion of innovations or social marketing traditions that are premised on identifying gaps and deficits and beliefs that new ideas about health come from the outside, are promoted by a change agency through expert change agents, and use top-down persuasive communication strategies to educate their client audience. The PD approach flips these long-standing tenets, positing that innovative ideas are often lurking within the system, so that the role of the change agents is to facilitate a process whereby the community can self-discover these ideas, and where dialogue and “social proof” results in a more sustainable adoption of desirable health practices. Social proof is a psychological phenomenon in which people come to believe that they can adopt a different practice because they discover people like them, in their own community, using the practice. If they can do it, others can too (Singhal & Dura, 2012). As the PD behaviors are already in practice, the solutions can be implemented without delay or access to outside resources.

Further, the PD approach challenges conventional implementation practices. Conventional learning theories assume that knowledge will change attitudes, which will in turn change practice. PD reverses that idea. PD practitioners have found action is the first step in changing attitudes. As opposed to subscribing to the notion that increased knowledge changes attitudes, and attitudinal changes change practice, PD is rooted in changing practice, as can be seen in the cooking sessions that took place in Vietnam and gender-based role-playing organized by the community in Pakistan. PD is premised on the notion that people change when that change is distilled from concrete action steps. PD believes in “acting one’s way into a new way of thinking.”

The PD approach holds important implications for scholars and practitioners who address global health challenges. Paradigmatically, the PD approach is situated in stark contrast to the traditional deficit-based, expert-driven, message diffusion approaches. In the PD approach, the community defines the problem, determines the presence of PDS, self-discovers the solutions, and is able to implement them right away without access to special resources. For this and other reasons, the stock of the Positive Deviance approach is bound to rise among health communication researchers and practitioners.

Recommended Readings

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