

# Promoción de Salud Multi-Comunitaria, 2008-2012

Salud Comunitaria, Clínica Episcopal Esperanza y Caridad  
 San Pedro de Macorís, República Dominicana  
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**Promoción de Salud Multi-Comunitaria** (PSMC) built upon a previously established volunteer community health promoter program initiated by Summit Alliance Global Health in 2001. During the years 2008 through 2012 the program expanded geographically, numerically in terms of health promoters and beneficiaries, and thematically with additional health topics added. The project is estimated to have reached more than 22,000 people in 12 communities.

## Overview

### Health Promoters

The program included 12 communities in the Province of San Pedro de Macorís, Dominican Republic. From 2008 to 2012, the most volunteer health promoters active at one time was about 180 individuals. The final count in December 2013 was 135 active health promoters.

Turnover in health promoters occurred as people moved, as young people left for university, and as volunteer health promoters found employment. During the course of the program, the individual community health promoter groups developed ways to replace and train new health promoters.



The volunteer health promoters were overwhelmingly women and self-described house wives. Through the program, many found that they had unrealized potential, talents, and skills. Health promoters became members of their community councils, became activists organizing other community initiatives, or found employment related to their health promoter training (including one woman who became a Provincial Director for Vaccine Services for Dominican Public Health – the first non-physician or non-nurse in the country to hold that position). Similarly, many of the adolescent health promoters found health related employment or went on to study for the health professions such as nursing or medicine.

### Phase I and Phase II

PSMC had two phases. In the first phase (2008-2010), the network of community health promoter groups was expanded through addition of more communities and health promoters. The initial phase emphasized methodology and theory of individual change as health promoters visited individual households monthly to evaluate and make interventions there. During the second phase (2011-2012), the health promoter groups participated more directly in setting the agenda of this health program, receiving additional instruction in program planning, management, and evaluation. Also, the topics chosen during the second phase required method and theory related to community-level models of intervention in addition to individual health behavior change.

The second phase included a transition plan. The transition plan (or exit strategy) sought to improve the chances that the community health promoter groups continued as resources in their communities after the program ended. Besides health topics during the second phase, the health promoter workshops included topics such as program planning, monitoring and evaluation. The goal of the transition plan was to equip the health promoter groups to identify problems, plan and execute programs, and evaluate them in their communities independently of outside resources.

### Health Topics and Objectives

The original objectives of the program during the first phase related to the causes of child mortality (diarrhea and dehydration, acute respiratory infections, and vaccine preventable diseases), women's health (early detection of cervical cancer and breast cancer), and sexual health including human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). Workshops for health promoters covered these topics first, along with workshop on health promotion itself. These topics formed the core emphasis for the first three years of this health program. Health indicators related to these topics improved during the initial years, and subsequently continued improving until the end of the program in 2012 (see Table and Figures).

Additional health topics were introduced as the program progressed: maternal & infant health; nutrition; tuberculosis; Dengue fever; chronic disease management; death, dying, grieving and mourning; first aid and first response; physical care of the home-bound patient; alcohol; and domestic violence.

Workshops were generally held in the community and lasted no more than one day. Follow-up sessions gave practical, hands-on experience. For example, there was a practical on counting respiratory rates, recognizing intercostal retractions, and taking an accurate temperature to evaluate children with fever.

### Beneficiaries

The project reached 22,180 people based on community demographics and direct health promoter coverage (13,280 adults; 6,006 young people from five through 17 years old; and 2,984 children ≤ four

years old). In addition, we know that health promotion messages circulated in the communities beyond the households directly contacted by the health promoters. The actual reach of the project included additional people beyond those households included in the numbers above.

### Community Selection Criteria

Criteria for community selection included: presence of a contemporaneous microeconomic development program<sup>1</sup> and sufficient social capital prior to the beginning of the health promoter program. Sufficient social capital was indicated by a functioning community council whose community council members were: 1) knowledgeable about their community (i.e., knew economic and population data, community resources, etc.); 2) able to provide a list of health promoter candidates who would be respected in the community; and 3) willing to accept responsibility for the geographical assignment of health promoters in the community. In addition, community social capital was assessed informally through the community health staff's conversations with community members.

Communities were initially contacted through the community council. After the initial evaluation, two communities were not offered the program. Another community was included three years following the original contact after they had gotten themselves organized. One community (Barrio Blanco) was enrolled even though it did not meet the selection criteria; it had a failed health promoter group, and was phased out. When one health promoter group (Restauración) began to work in an adjacent poorer neighborhood (Barrio Lindo), interest arose in having a health promoter group there; preliminary organizational efforts occurred outside of our usual selection process and were not successful in Barrio Lindo.

Overall, the community selection criteria functioned well. In communities that met the selection criteria, a successful health promoter program was established. When we did not follow our own selection criteria and process, ongoing health promoter groups were not maintained.

### Working within the Institutional Church

Working within the institutional Church had advantages and disadvantages.

Having a Dominican religious institution as the parent organization was a distinct advantage when approaching communities and collaborators. Other advantages included access to Church related resources such funding sources. The Church association also provided access to resources for ancillary activities (such as community health fairs and short-term team support for health promoter activities).

However, the institutional Church did not try to understand health promotion beyond a simplistic preventive medicine conceptualization and did not fully embrace the concept of a community-based program.

The program came under some criticism from within the Episcopal Church for not working more directly with and through the Episcopal Church. Church-based programs without strong community involvement tend to be less effective and less sustainable. Limiting the health promoter program to communities in which the Episcopal Church already had a presence or using an existing Episcopal Church presence as a reason to include a community would have undermined the community selection criteria described previously. In fact, confusion regarding the role of a local Episcopal Church and the Episcopal Church's history of past paternalistic handout programs was problematic at times.

As recently as the last six months of the program, an Episcopal priest in one community made comments implying the church's "ownership" of the local health promoter group within a paternalistic, hierarchical

system; the remarks tended to undermine the sense of autonomy and independence that the community health team had carefully nurtured over the years. While we are certain that the comments were made while the priest was trying to be helpful, the episode does highlight the previously recognized difficulties caused by some organizational assumptions within the church when dealing with health programs.<sup>2</sup>

The health promotion program did have effects related to evangelism in the communities. Some of those effects are described in the Evaluation section under the heading “Evaluation of the Non-Health Effects.”

### Dominican Public Health

It should be noted that others besides the Church did not recognize the community-base of the health promoter groups. Throughout the end of the second year and the beginning of the third year, Dominican Public Health repeatedly asked the Clinic for “permission to use your community health promoters”. Each time, Dominican Public Health was referred to the individual community coordinators, and was told that each group controlled their own agenda and could decide whether to collaborate. This direct communication strengthened the connections and relationship between Dominican Public Health and the health promoter groups that eventually lead to a variety of collaborative efforts and a flow of materials from Dominican Public Health directly to the community health promoter groups.

The original program goals (causes of child mortality, cervical cancer screening, and HIV/AIDS) were in agreement with the Dominican Public Health goals. The program was careful that the health promoter manuals and workshops were in agreement with the Dominican Public Health standards and recommendations. Conforming to Dominican Public Health standards was helpful in forming and maintaining relationship with Dominican Public Health, as well as in later collaborative efforts.

As the years passed, care was taken that revisions of Dominican Public Health policy were incorporated into the program. As new health topics were added, the applicable Dominican Public Health standards and recommendations were included.

### **Methodology Matters**

Beneficial program components included:

- 1) Using a model based on sound theory that had been shown to be effective.
- 2) Ensuring that the health promoter groups had a community base (rather than simply a church or clinic base).
- 3) Valuing the individual health promoters and their sacrifices to serve their communities as volunteers.
- 4) Providing the volunteer health promoters with sufficient information to perform the health promotion interventions effectively while not overburdening them with extraneous information or exerting unnecessary demands on their time as volunteer workers.
- 5) Having the community health staff available to back-up the health promoters when needed.
- 6) Early commitment by everyone to the monthly community health promoter group meetings that eventually served as a mechanism to share and solve problems, to plan and evaluate programs, to offer themselves continuing education, and to develop an *esprit de corps*.

- 7) Organization of the program so that the community health promoter groups were independent groups within a health promotion network, rather than divisions of a centrally controlled program in different communities.
- 8) Having a committed group coordinator for each community (helpful logistically, such as with communication, and also contributed to group identity and independence).
- 9) Supervision by the community health staff to assure competence, grow self-confidence, and contribute to problem solving rather than for accountability to achieve numerical program goals.
- 10) Careful choice of participating communities using pre-defined selection criteria (including whether a community had a microeconomic development program and a sufficient level of social capital for the program).
- 11) Clear descriptions of what health promotion was and what health promoters were expected to do before each community health promoter group was formed.

Problematic program components included:

- 1) Community work may include times outside of the traditionally defined work week. The personnel policies of the Clinic state that work hours are from 8 am-5 pm on weekdays. Applying these policies to the community health staff was problematic. The volunteer health promoters often preferred meetings and events during the evenings or on weekends.
- 2) The women's health promotion activities sometimes encouraged screening for problems for which the Dominican public health system could not provide adequate follow-up.

**Evaluation**

PSMC was a Christian community health development project. Health may be understood from a holistic New Testament perspective as a state of wellbeing that includes physical, psychological, emotional, financial, spiritual and other dimensions.<sup>3</sup> Health is related to the Biblical concept of *shalom*, a rightness of balance and relationship spanning personal, social and spiritual spheres.

The first of two principles of Christian community health development states that the performance of a health program is only measurable in terms of improved health among people.<sup>4</sup> Projects that do not improve health are poor stewardship.

The second principle is that Christian community health programs must be as concerned with the process of improving health as they are with the health outcomes.<sup>4</sup> The process must be one that assists individuals, families and communities to grow in initiative, autonomy, and self-efficacy.

The PSMC project had both health effects and non-health effects at personal, household, and community levels.

Evaluation of the Health Effects

The main health indicators were related to the causes of child mortality (diarrhea and dehydration, acute respiratory infections, and vaccine preventable diseases), women's health (early detection of cervical cancer and breast cancer), and sexual health including HIV/AIDS. Community surveys during the program gathered responses to a set of health indicators at Baseline, Follow-up, and Final stages.

The Baseline surveys were done before the health promoter program began in a community. The Follow-up surveys occurred after 12-14 months of operation of the program in a community. The Final survey occurred in December, 2012.

In general the health indicators improved (Table and Figures). Note that the probability (P) values listed should be taken as a general estimate of statistical significance and not as absolute values because the data were not standardized to the differing community populations. Significance testing was by the z-test for two proportions, Fisher's exact test, or the Chi square test for categorical data. As with any social program, multiple factors may be impacting the measured results and we cannot be certain that the health promoters' interventions caused the changes in the indicators.

The item measuring the two-week prevalence of acute respiratory infection did not perform well. Informants reported that about half of all children had an acute respiratory infection in the prior two weeks regardless of other factors. On qualitative questioning, there was general agreement that serious respiratory infections in children decreased. However, the survey item was too broad to capture any change.

The two-week diarrhea prevalence measurement was probably more robust. However, there was only a small improvement in childhood diarrhea prevalence despite more potable water use and decreased alimentionation for infants with anything other than breast feeding or formula. Clean water can only decrease childhood diarrhea rates so far. Beyond that point, the "water washed" diseases (as opposed to "water borne" diseases) are the primary factor causing diarrhea and the critical determinant is the quantity of water available for washing and hygiene purposes. An explanation for only a small improvement in diarrhea rates may be that the measured prevalence rates of around 15% to 20% are the lowest clean water produces under these circumstances without additional hygiene measures that were not part of this project.

Vaccine rates for children four years old or younger improved dramatically. The initial rates of vaccine uptake in these communities were worse than the Dominican national average; the final uptake rates were better than the Dominican national average.

The informational items (people knowing where to get an HIV test and that breast feeding alone is sufficient for at least the first six months of life) showed good improvement during the project.

Reported hand washing behavior increased. We cannot know whether people are actually washing their hands or just saying that they do. At the least, informants got the message that the correct answer is that hand washing is occurring. It seems likely that hand washing has actually increased.

The proportion of women who had a Papanicolaou test within the past year increased only slightly. Of note is that on the final survey, essentially every woman for whom a Pap test was indicated knew that a Pap test was indicated and that she should have one annually. Obtaining a Pap test is limited by access to testing centers and cost.

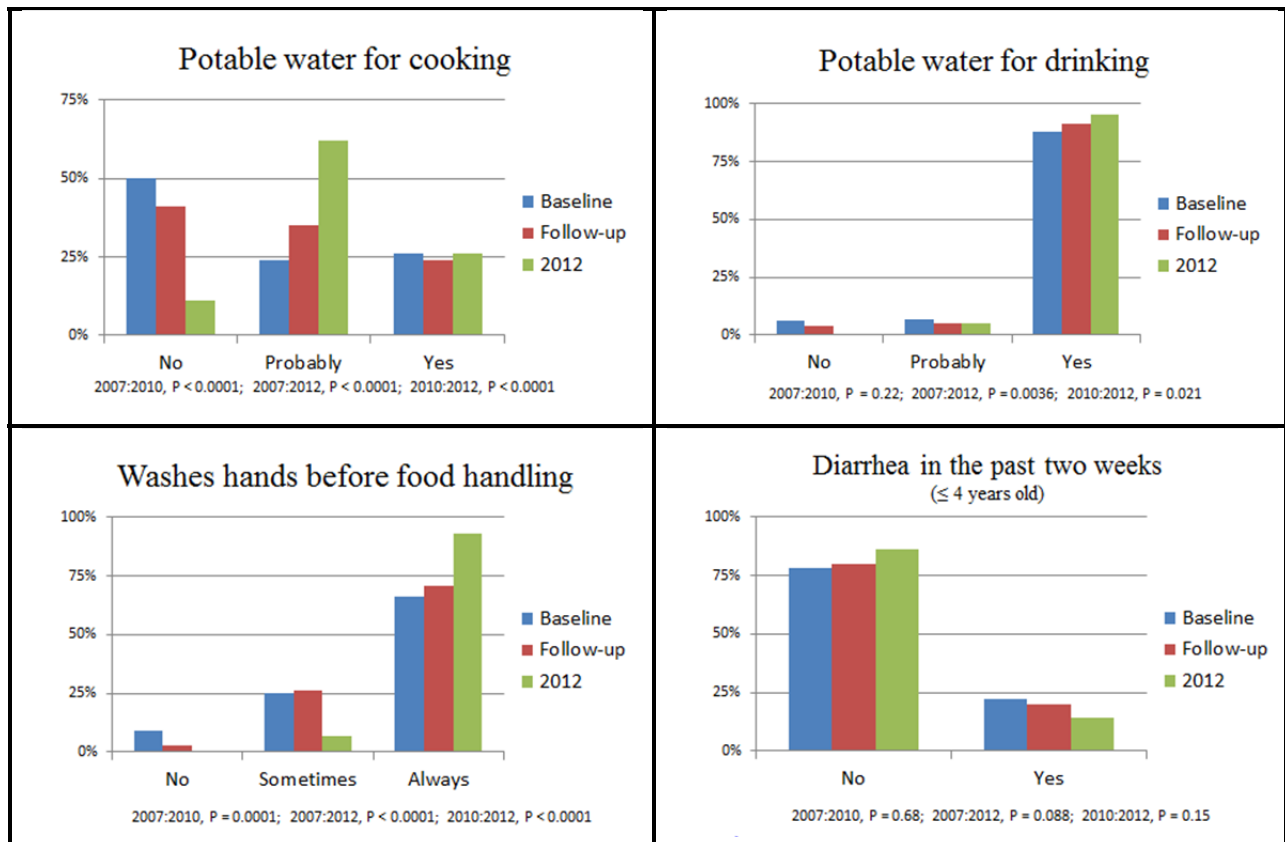
The proportion of babies only breast feeding during the first six months of life nearly doubled during the project from 13% at baseline to about 24% at follow-up and final evaluations. The larger change was in the number of infants who were receiving only formula or combined formula/breast milk (going from ~4% to ~29%). The health promotion message was that breast feeding alone was sufficient nutrition for the first six months. The received message seems to have been that extra water, juice, and solid foods were not good for baby. Formula seems to have been seen as a reasonable substitute for breast feeding in many cases, and the appeal of formula (convenience, freedom for mother, etc.) is well known. In the final

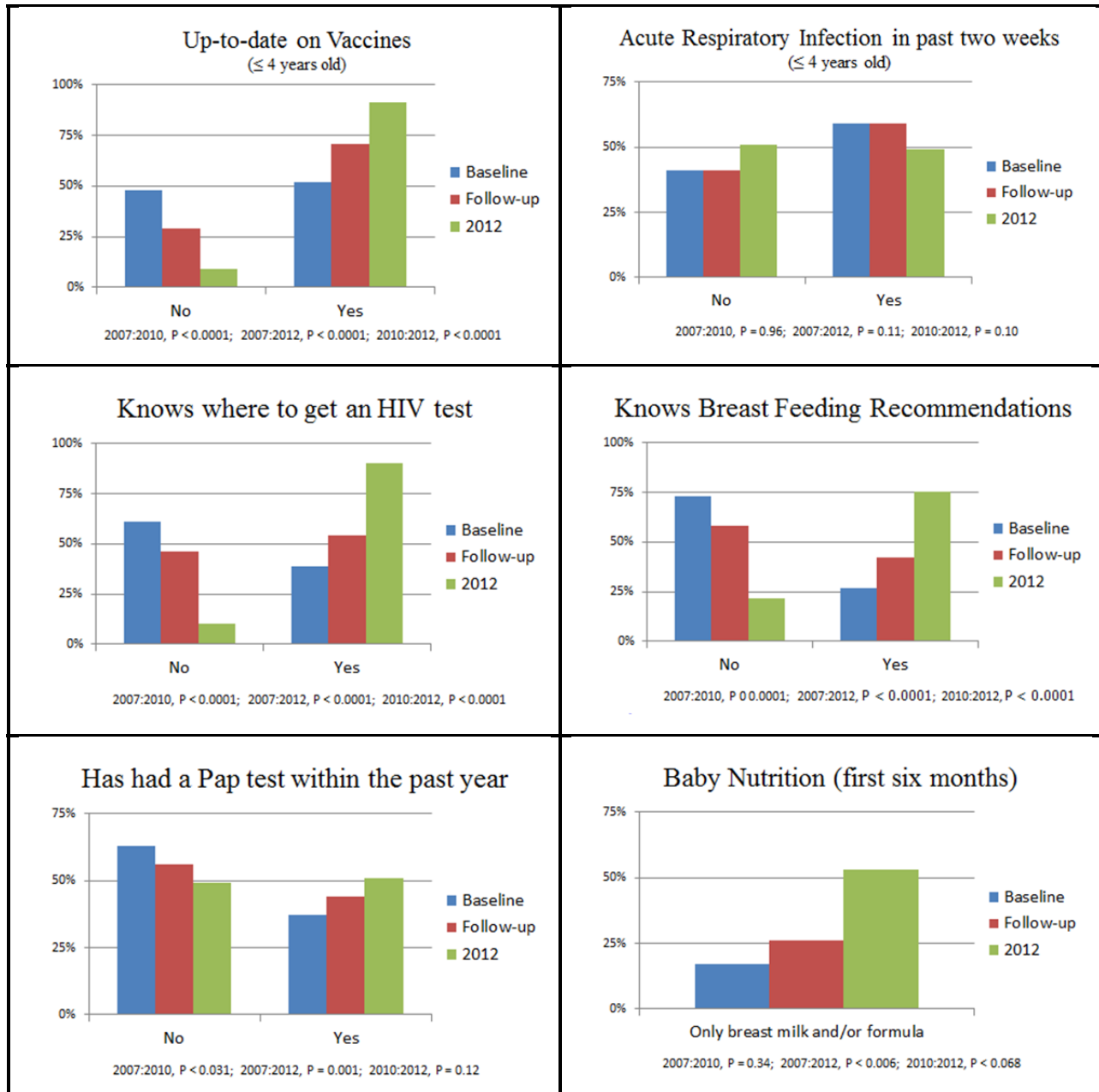
evaluation, all formula fed babies had purified water used in formula preparation. While formula fed babies are not the ideal situation, the results probably represent an incremental increase in health for infants. Evidence for this lies in the difference between 2001 when nearly everyone in a group of women knew of a child who had died of diarrhea in the past several years and 2012 when no one could identify a diarrhea/dehydration death in a child.

**Table. Participants in community surveys**

|                            | <u>Baseline</u> | <u>Follow-up</u> | <u>Final 2012</u> |
|----------------------------|-----------------|------------------|-------------------|
| Number of households       | 818             | 608              | 184               |
| People                     | 3,809           | 2,772            | 875               |
| People per household       | 4.66            | 4.56             | 4.76              |
| Adults                     | 2,015           | 1,517            | 475               |
| Youth                      | 1,333           | 901              | 283               |
| Children ( $\leq 4$ years) | 460             | 354              | 117               |

**Figures. Changes in Health Indicators**





Evaluation of the Non-Health Effects

PSMC was more than a health program. The process of the project had effects beyond the health outcomes.

Some of the effects of the PSMC project for individual health promoters were described above. The PSMC health program functioned as a women’s leadership development program and as a career development program (especially for young people), for example. Mothers who had an assigned health promoter visiting them reported improved self-efficacy as they felt more competent to care for their families, with subsequent increases in their self-esteem.



Some households reported changes in relationships related to the PSMC project. In some cases that we know about, mothers were able to use the information provided by the health promoters to negotiate changes in household management and routines. The program equipped them to convince spouses, mothers-in-law, or others in the household of the advantages of adopting healthier behaviors (increasing the mothers' status within the home as well).

The PSMC project contributed to community development. The local health promoter groups served as examples of what could be done in the community as well as community resources.

In one instance, community council members were surprised at the large number of people who responded to their call to those interested in serving as volunteer health promoters. The council had predicted that only a handful would volunteer based on their understanding that their community population was poor and would only work if they received something tangible for their efforts. Following the event in which 26 people expressed interest in participating in the program, one council member remarked that perhaps they had underestimated the community – perhaps there were more possibilities to mobilize the community to make improvements than had been realized.

In a different neighborhood, the community council embraced the health promoter project as a rallying point for the community, using it as an example and a motivation for other projects. The health promoter group in another community became the group to which the community council turned to help organize new initiatives, whether health related or not.

There were non-health effects related to the Church. During the project, church attendance tended to rise in neighborhoods.

Un-churched health promoters began attending church. Some health promoters related that their involvement in the health promotion project stimulated their interest in social ministry and the church. There were also circumstances in which the health promoters were actually evangelized by the families that they were committed to visiting monthly.

Some people in the communities began attending church as a result of the health promoter groups. Some health promoters functioned as overt evangelists according to their individual convictions related to the appropriate action to take when encountering a non-believer on their home visits.

However, more commonly the project (whose church association was clearly evident) functioned as an evangelism tool in itself. For many people, the appearance of a health promoter at the door to help a young mother manage and avoid diarrhea in her children presented the church as a pragmatic and caring entity. People had not seen the Church behaving in this way before. Some people responded by checking-out local churches and becoming involved in local ministry.

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