

NEWSLETTERS AS A CHANNEL FOR COMMUNICATION IN A COMMUNITY-BASED *Aedes aegypti* CONTROL PROGRAM IN MARÍLIA, BRAZIL

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ABSTRACT. In Marília, Brazil, community newsletters were established in a pilot project on community-based *Aedes aegypti* control. The newsletters were an excellent way of promoting communication between community members and project personnel. While people might not have attended a dengue meeting, they did turn up at meetings to plan the newsletters. During these meetings project staff obtained information about the communities that was crucial for planning a community-based recycling project that targeted many *Aedes aegypti* larval habitats. The newsletters were not an appropriate channel for transmitting information about dengue prevention and mosquito control.

Following many years of eradication, during the 1970s and 1980s both *Aedes aegypti* (Linn.) and *Aedes albopictus* (Skuse) established themselves in coastal Brazil and are expanding their ranges into the interior of the country. The dengue epidemics that have followed now constitute a major threat to public health (Marzochi 1994, Pontes and Ruffino-Netto 1994). One response to increasing dengue transmission has been to involve communities in the planning and implementation of control activities (Gubler 1989, Winch et al. 1992).

One prerequisite for community involvement is the establishment of a 2-way channel of communication between communities and public health officials. Communication channels such as radio, television, and posters are unsatisfactory in that they typically allow officials to disseminate information to the community, but do not allow the community to express their concerns to the authorities. Telephone lines to vector control offices allow people to convey individual concerns about rodents, insect pests, and other sanitation problems, yet these may not be representative of the views of the community as a whole.

Marília is a city of 160,872 located in the state of São Paulo in southeastern Brazil, 450 km west of the state capital, São Paulo. *Aedes aegypti* was documented in Marília for the first time in 1985. In 1992 *Aedes albopictus* entered the western portion of the state where Marília is located, and in 1994 the first outbreak of dengue was confirmed in the city. Years of intensive educational efforts have succeeded in raising awareness of dengue prevention to a very high level, but *Aedes aegypti* infestation continues in all parts of the city.

Since 1993 the authors have been involved in a pilot study in 2 periurban areas to develop new approaches to community participation in *Aedes ae-*

gypti control (Mazine et al., in press; Macoris et al., in Press). One of the approaches under investigation has been the establishment of community newsletters. This idea arose because educational materials that focused exclusively on dengue prevention frequently were received with apathy and even disdain by local residents. This reflects in part how little experience people have had with dengue. In a survey of 459 residents conducted at the beginning of the study, only 1.5% responded that someone in the family had been sick with dengue, and 2.0% knew of someone outside of the house who had suffered the disease. Many could not see why they should be bothered by information about a disease that had yet to kill anyone in the city.

Community newsletters (one double-sided page) were created with 3 objectives. First, they were to serve as a forum for the exchange of information of relevance to the neighborhoods such as announcements of up-coming meetings and social events. Second, they were to be a way of bringing together people from different parts of the study area and the control program to work on common goals and create an atmosphere of confidence. Finally, they were to provide a channel for feedback and discussion of ongoing dengue prevention activities such as results of larval surveys and collection of solid waste for recycling.

The plan developed for the newsletters called for them initially to be written, produced, and distributed through collaboration between the personnel of the control program (SUCEN) and residents of the 2 study areas, followed by devolution of responsibility for the newsletters to local community organizations. It was recognized at the outset that devolution of responsibility would require each neighborhood to develop a sense of ownership of the newsletter, of the newsletter belonging to the community rather than to the control program. A 4-part strategy was implemented to build commitment to the newsletter:

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Table 1. Characteristics and participation in community newsletters for 2 project areas in Marflia, Brazil.

	Project area			
	Costa e Silva		Bandeirantes	
Population and land use				
Approximate population	10,000		11,000	
Number of blocks	86		89	
Number of houses	1,924		2,222	
Number of commercial establishments	61		32	
Residents' associations				
Number of associations	4		1	
Community meeting hall	Yes		No	
Involvement in project	Extensive		Limited	
Participation in newsletters				
Number of suggestions for names	151		162	
Input into design/editing	Significant		Limited	
Local sponsorship	Easy to find		Hard to find	
Copies distributed per issue	2,500		2,500	
Method of distribution				
Issue:	1st	4th	1st	4th
Door-to-door	0	855	0	650
Health post	200	200	200	100
Schools and churches	950	350	650	1,150
Residents' association	300	300	200	50
Evaluation of distribution				
Number of blocks sampled	25		22	
Number of people interviewed	221		321	
Number receiving newsletter	115		223	
Percent receiving newsletter	52.0		69.5	

1. Local organizations such as residents' associations were invited to submit articles, assist with the design, place announcements in the newsletters and help with distribution.
2. Local businesses were invited to underwrite some of the costs of production and/or place advertisements.
3. The first edition of the 2 newsletters had no name. Residents were invited to hand in their suggestions for names at the local health post. The person submitting the best name was awarded a bicycle donated by a business in a ceremony attended by local dignitaries and appeared on the front page of the second newsletter.
4. Information about dengue, mosquitoes, and program activities was deliberately presented in a low-key way on the second page so as not to create the impression that this was a "dengue newsletter."

The two project areas correspond to the catchment areas of 2 health centers, each containing a number of neighborhoods. The areas are similar in population and type of housing, as shown in Table 1. For both neighborhoods, around 150 people suggested names for the journal, different community organizations submitted articles and distribution took place through a variety of methods.

In the Costa e Silva project area, it was easy to

convince businesses to place advertisements as well as to involve people in designing and writing articles for the newsletter. Meetings were held in the community hall and attendance was good. Refuse was identified as a problem for the entire area, a problem that served to bring people together to work on the newsletter as well as other projects.

The chief problem in Costa e Silva was disagreement over which communities the newsletter was intended to serve. The project area corresponds to the catchment area for the Costa e Silva health post, an area that encompasses the neighborhood of Costa e Silva as well as 3 other neighborhoods and a recently established *favela*. Four different associations represent these 5 small neighborhoods. Some members of the residents' association for Costa e Silva thought that the newsletter should be primarily for the Costa e Silva neighborhood, and that the name should be "Journal of the Costa e Silva neighborhood." Copies of the newsletter given to the Costa e Silva residents' association would not be distributed in the surrounding neighborhoods, a fact that partially accounts for the significantly lower number of people reporting that they had received the newsletter (52%) in comparison to the other study area (69.5%) as shown in Table 1 (chi-square = 16.95, $p < 0.001$). Many residents of the adjacent neighborhoods displayed antagonism

toward the residents' association of the Costa e Silva neighborhood. One solution has been to allow space in the newsletter for each association to make its own announcements and to air its views.

In the Bandeirantes project area, problems of local politics were notable for their absence: one residents' association represents the entire area, and its legitimacy is recognized. The major problem in Bandeirantes was the lack of problems: a recycling project initiated by the municipality was already in place, access to basic services was essentially 100%, and housing was good. There were no pressing issues to motivate people to either write articles or avidly read a newsletter. Neither dengue nor mosquitoes were seen as matters of interest. In fact, a number of residents reacted negatively when they saw a drawing of a mosquito in the second issue, asserting that they were already saturated with details about mosquitoes, and that the whole subject was completely irrelevant to them. A further difficulty encountered in Bandeirantes was finding businesses to sponsor the newsletter or place advertisements, as the area contains fewer businesses (Table 1). This made it necessary to seek sponsors from outside the neighborhood.

Different methods of distribution were used, with greater reliance in later issues on door-to-door distribution (Table 1). Distribution through health posts, schools, and churches was the easiest to carry out yet had the disadvantage of circulation to persons from outside the project areas. Distribution through the residents' association assures a greater coverage over a limited area, but in the Costa e Silva project area each neighborhood association would only cover its own neighborhood, and would often delegate responsibility to a third party less conscientious about carrying out the task. Door-to-door distribution was used later to achieve greater coverage, but is very labor-intensive.

To assess the impact of the newsletters, a rapid survey was administered to 44 people who had received the newsletter and were available to be interviewed. Only 7 had a copy of the newsletter in the house at the time of the interview when 4 issues had already appeared. Features of the newsletters that people said they always read were information on health/health post (32), the residents' associations (30), advertisements (30), classified advertisements (28), and announcements about schools (26). Only 10 respondents had noticed and read information about refuse disposal and recycling, 9 about mosquitoes, and 5 about dengue. A total of 37 said that they were satisfied with the newsletter and would not change anything in it. The features that most captured people's attention were photos of other residents (14) and information about the health post (13). When asked what they made use of from the newsletters, people mentioned information about schools (12), health (11), residents' associations (11), and classified advertisements (8). Almost all respondents (37) said that the newslet-

ters had not changed their attitudes or outlook on any issue.

To summarize, our experience with newsletters is that they are an excellent way of mobilizing communities and promoting communication between community members and project personnel. While people might not have attended a dengue meeting, they did turn up at meetings to plan the newsletters. Project staff participating in these meetings were able to learn what the concerns of residents were in an informal way. This information would otherwise have been difficult to obtain, and was crucial for planning a community-based recycling project that targeted many *Aedes aegypti* larval habitats. The newsletters were not in our experience an appropriate channel for transmitting information about dengue prevention and mosquito control. The newsletters are being continued with a new 4-page format, with health information, the residents' association, photographs of residents, and information of general interest each allocated one page. Initial evaluation of the new format has been positive, with readers showing particular interest in the photographs. The principal reason for continuing with the newsletters is to maintain good working relations with community groups, rather than to communicate information. These good relations in turn are the foundation for other community-wide initiatives.

Careful consideration needs to be given to the geographic area served by the newsletter, and to providing an opportunity to all neighborhood groups to participate in design, production, and distribution. Community newsletters have better chances of being sustainable if the neighborhood has a large number of businesses.

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