# COMMUNITY PARTICIPATION IN HEALTH ACTIVITIES IN AN AMAZON COMMUNITY OF BRAZIL<sup>1</sup>

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This article describes community participation in a comprehensive eight-year health program at Porto Nacional, a town in Brazil's Amazon region. The authors discuss various techniques employed to encourage community participation, indicate methods used to resolve low-key conflicts in a positive manner, describe the major contributions made by community participation in this program, and present a number of conclusions considered applicable to other communities in this part of Brazil.

# Introduction ~

In Brazil, as in many other developing countries, one of the most serious problems confronting health services is the existence, even within the public sector, of multiple agencies that duplicate each other's activities and at times come to compete among themselves. Partly to help cope with this problem, an experimental program was carried out at Porto Nacional, a town in northern Goiás State. The program sought to integrate health agencies, resources, and activities at the field level through the work of a multiprofessional team.

This paper describes the work of that team, which consisted of six physicians (one sanitarian, two surgeons, two internists, and one pediatrician), two social workers, one nurse with specialized public health training, and one educator. The team began its activities in two stages, the first professionals arriving in February 1968. All team members devoted their full time to the project. Some personnel changes occurred during the subsequent eight years

of activity, but these did not significantly affect the aims or pace of the work.

In determining the composition of the team, a basic concern was that it should contain all the elements needed to operate an integrated health unit. In the final analysis, the team's makeup depended on the availability of experts willing to work under the conditions prevailing in the region; this unfortunately resulted in omission of some desired professionals, such as nutritionists for example.

An effort was made to avoid unilateral decisions affecting the local population, which was encouraged to participate in different ways and at various levels in the improvement of health conditions.

The purpose of the project was to establish comprehensive integrated medical care through multiprofessional action and adaptation of the practice to the local environment, with maximum community participation. To promote this aim, the team, under contract with the state government, assumed responsibility for operating the principal medical facility in the area—a health unit with a 50-bed hospital—and proceeded to harmonize its activities with those of other local health agencies. These other agencies were as follows: SUCAM, the federal agency assigned to combat major endemic diseases in the region

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(mainly malaria and cutaneous leishmaniasis); the Brazilian Welfare Legion (LBA), a federal agency for maternal and child care which eventually merged all its activities with those of the health unit; the federal and state welfare institutes, which began to operate through the unit: and the Federal University of the State of Goiás. which sent medical students to the unit for a training period emphasizing public health activities. The town's private physician also came to coordinate with the unit. referring patients and participating in the team's scientific meetings. In addition. unit activities were coordinated with such agencies outside the health sector ACAR - a rural credit and extension agency that worked with the team to develop a number of joint projects providing care for rural communities.

To help attract technical and financial resources normally unavailable to public organizations, the team founded a non-profit agency to promote health and education that was named COMSAUDE. This agency undertook to promote programs for housing improvement and vermin control; also, working with the local rural association and the municipal government, it supported establishment of a nutrition education and rehabilitation center and a rural health service employing auxiliaries and providing basic primary care.

#### The Area

The Amazon region in general has a warm humid climate, a widely scattered population, and extreme communication problems now being alleviated through an extensive road-building program.

Porto Nacional, situated on the right bank of the Tocantins River, a tributary of the Amazon, was formerly a livestock trading center and a river port that supplied the surrounding region. With construction of the Belém-Brasília road (which passes 70 km away from Porto Nacional on the other side of the river), the town ceased to be the regional center of economic activity. Nevertheless, it did retain a position of some importance by virtue of its physical resources-including schools, an airport, a banking agency, tax collection agencies, a court, and a health unit-especially for communities on the right bank of the river. When the team started its work the municipality had approximately 27,278 inhabitants (1968 IBGE statistics) distributed over an area of 13,682 km<sup>2</sup>, the average density being 1.99 inhabitants per km<sup>2</sup>. Of the total population, about 7,200 people lived in the urban center. Eight years later, in 1975, the urban population had swelled to an estimated 12,000 people.

During this period the region's economy was based on agriculture and livestock—extensive low-yield cattle raising and farm activities devoted mostly to rice. The virtual absence of industry meant that the local economy was incapable of creating enough jobs for the growing population. Thus, it appears that stepped-up injection of outside resources—chiefly by the public sector—was the factor responsible for preventing stagnation or even regression of urban development.

This image—of an old city which had been more important and had seen greater development in the past—was reflected in two commonly held attitudes of the population: a conservative belief in holding onto tradition and a disbelief in the possibilities for future development. There was a highway link about 800 km long with the state capital (via the then-unpaved Belém-Brasília highway), and there were telegraph and postal services, but there were no telephones.

#### Health Conditions

The region's health problems were characterized by predominance of waterborne and foodborne diseases; moderate-to-high infant mortality (about 70 deaths per 1,000

live births in 1975); relatively high malaria morbidity (e.g., 810 cases at the health unit in 1972); tuberculosis, leprosy, and cutaneous leishmaniasis: a moderate incidence of Chagas' disease; and extensive infestations of vermin. A survey sponsored by COMSAUDE in 1971 revealed-as will be discussed later - a high degree of proteincalorie malnutrition in the urban zone. Within the entire region - known as Middle Araguaia-Tocantins-there were only six practicing physicians. On the other hand, the presence in the town of certain health sector resources had important implications for development of the team's work. That is, when initial efforts were made to generate community participation, people were already familiar with common technical intervention procedures employed in the health field, particularly those relating to preventive action. Moreover, the health service to which the team attached itself was already quite well-known and accepted. principally through its work with lowincome groups.

#### Psychological and Sociocultural Factors

The social scene in Porto Nacional may be characterized as one dominated by a small group of landowning families that have exercised political leadership since last century. The more recent arrival of other well-to-do families, mainly from the states of Maranhão and Piauí, supplanted part of the original leadership and led to the establishment of a second political faction. This dichotomy between "traditionalists" and "new arrivals" persists unchanged to the present day, despite changes in the country's political life. The political parties involved have different names, but the clientele relationships remain unchanged. Within this setting, as in many other interior Brazilian communities, the public is rather reluctant to participate in any new movements occurring in the region aside from those associated with traditional religious events.

When our team arrived, the community had a mothers' club run by the LBA (Brazilian Welfare Legion). Under the local direction of one of the leading political groups, the club was performing a useful function by motivating mothers to deal with problems of family health. There was also a local health unit operated by the Public Health Services Foundation (FSESP) attached to the Ministry of Health. Before the team arrived, this unit had established a home visiting service that was promoting public participation, principally of mothers, in health activities.

## Project Description and Analysis

This article seeks to describe the team's problems and accomplishments during its first eight years in Porto Nacional. The aim is not to report on any sort of controlled experiment in health education or community participation, but rather to briefly analyze how educational activities and community participation contributed to a project that sought to provide comprehensive care in an Amazonian setting.

#### The Vermin Control Program

This program had two phases: an initial phase which enlisted support from nearly all sectors of the population; and a later "permanent" phase implemented by the basic sanitation service of the integrated health unit, with fundamental collaboration by the program's beneficiaries.

When the team arrived, the vermin problem was sufficiently evident and widespread to be of serious public concern. Vermin control was therefore chosen as the vehicle to use in approaching the community. At this stage the purpose—in addition to stimulating community participation—was to find a way for the team to make itself known to the residents and to

become familiar with a community in which it had only recently arrived. Accordingly, the town was divided into work sectors and groups were organized to conduct home visits. The object of these visits was to determine (1) the precise extent of improper waste disposal—the main cause of the vermin problem, (2) to inform residents about the matter, and (3) to encourage them to seek an answer.

General meetings were held with institutional and local leaders. At the junior and senior high schools the problem was dramatized by means of puppet shows and poster-drawing contests. Soon the work took on the features of a real campaign with considerable impact on the community; a significant segment of the population—one having ample awareness of the problem and including members of most social strata—was mobilized.

The tangible results were reasonably good. During the campaign, from May to October 1968, a total of 253 cesspools were constructed. Previously, cesspools had been built at an average rate of five a month. No financial resources were made available to help with this construction, assistance being limited to encouragement and technical guidance. In view of this and the population's socioeconomic condition, the number of cesspools built attests to the success achieved.

To help overcome the financial problem, a group of residents in the poorest neighborhood was organized into an association for cooperative purchase of slab masonry, the building material considered hardest for people to obtain. Each association member made a weekly contribution of one cruzeiro,<sup>4</sup> and a drawing for the material was held once a week. This procedure was followed for six months and some cesspools were built. It was difficult to continue working this way for a long time, because of the considerable management work

involved. Nevertheless, it is noteworthy that the association did develop into a relevant social activity for the participating group.

Outside resources were subsequently obtained to finance the purchase of masonry slabs for those wishing to build cesspools. Representing 5 to 13 per cent of the total building cost - depending upon the quality of the materials-the masonry was only delivered when the homeowner had done the necessary excavation and had the other materials needed to finish the job. The integrated health unit's sanitation service has continued the program in this manner since the end of 1971, extending it into nearby rural areas in 1973. In the urban area, where the program has reached the poorest neighborhoods, the activities of education, motivation, and technical guidance have been performed mainly through the individual interviews conducted during home visits. Audiovisual aids have also been used to educate the community.

In the countryside, motivation has been achieved through meetings conducted by sanitation aides who have also taught homeowners how to make masonry slabs, by working together with supplied material, in order to avoid damage during transportation.

#### Municipal Health Boards

In view of the area's severe lack of health resources, the team organized periodic visits to two municipalities that had no physicians. To assure that the physician's monthly visits were well-utilized, boards were set up to serve as health work support groups. It was their job to identify cases most needing attention, to publicize talks given at the time of the physician's visit, to conduct surveys of local health conditions, and to ensure that preventive measures recommended at the time of the visit were carried out.

<sup>&</sup>lt;sup>4</sup>About US\$0.20, at the time.

Money collected from those patients able to pay was used to set up a fund to defray the board's operating expenses. Although these activities stopped in one municipality because airline service was discontinued (access by land being difficult, and nearly impossible during the rainy season) and also ended in the other municipality because a permanent physician arrived, the integrated effort of technical staff members and the community showed itself to be highly productive.

Another health board of a different kind was organized in Porto Nacional. Acting as a volunteer group closely linked to local health agencies, this board worked with the municipal authorities as an auxiliary element for identifying problems and making suggestions at levels of action within the scope of local government. Because of its relative closeness to the population, the board was also able to serve as a catalyst for stimulating health service activities.

The board was formed in response to a problem strongly felt in the community: a shortage of hospital beds in relation to existing demand. Because the hospital was the only non-profit treatment facility in northern Goiás within a radius of 700 km, the town usually contained a large number of outsiders who were destitute or dependent on local families for accomodations.

The board was initially composed of 19 members—health service representatives, institutional leaders, housewives, and other residents.

Starting with a campaign to solve the accomodations problem by building a home for convalescents, the board gradually went on to deal with other health matters: refuse collection and water supply services (both nonexistent in the town), construction of houses according to reasonable sanitary standards, provision of dental care, extermination of rats and control of hog-raising, promotion of health education, establish-

ment of sanitary conditions for sale of food, etc.

Tangible results stemming directly or indirectly from the board's work included: remodelling of the market place and institution of routine market place inspections; issuance of a municipal decree requiring periodic examinations for food product vendors; and municipal organization of trash collection.

The board of health also sponsored a broad community movement that eventually had an impact outside the health field—in such areas as farming and education. In addition, members of the board and those directly involved with it developed a greatly strengthened sense of social responsibility—for work pertaining not only to health but also to other sectors. Along with this came increased leadership capacity—among both board members and others—and enhanced ability to comprehend health problems and the measures appropriate to each case.

The principal constraints on broader action by the board were as follows: the difficulty of achieving the first goal envisaged, which required material resources greater than initially estimated; problems in interpreting the board's aims and patterns of action to certain sectors of the community; and gaps left by specific leaders who left Porto Nacional and who proved impossible to replace.

Nevertheless, even though the board did not achieve its initial goal—construction of a home for convalescents—the need for such a facility became evident to the community. The work was therefore taken up in 1974 by a charitable religious society, which has been operating a shelter to this end since the beginning of 1975.

### Health Surveys

These surveys, including one specifically addressed to child nutrition, were made to

help define health and sanitary conditions; they were carried out with participation by the population, which was made responsible for the collection of field data. Following appropriate training, students from the normal school served as family interviewers for surveys conducted in 1968, 1970, and 1971. The surveys thus provided both a useful way of employing volunteers and a tool for making the community aware of health problems—which could then be assessed and analyzed with the assistance of the collected data.

# Center for Nutritional Education and Recuperation

Participation by mothers and malnourished children is vital to the effective functioning of this center, which began operating in February 1972 and which has pursued essentially educational goals. At first the malnourished child stays at the center as a day-patient receiving a balanced diet, psychomotor stimulation, and appropriate medication. The mother comes in once a week to help with household chores: preparing meals, cleaning the premises, and taking care of the children. At the same time she becomes familiar with the hygiene and child nutrition practices adopted at the center. The mother also attends bimonthly educational meetings. In keeping with the center's approach, and to help assure continuity of nutritional recovery after the child leaves the center, no child is kept in the program unless its mother takes an active part in the center's work. Since it began operating, this center has obtained the collaboration of progressively higher socioeconomic levels in the community; because of this, voluntary monthly contributions have been sufficient to cover personnel costs-about 25 per cent of overall expenses.

# Housing Improvement Program

Housing conditions, particularly in the

outlying neighborhoods, were so unfavorable as to seriously impede health education work and introduction of good sanitary habits. These districts were also a source of serious community concern because they failed to offer adequate shelter, particularly in the rainy season. In view of these conditions and the existence-even among the poor — of owners of lots who had built precariously on their own plots, a program to improve housing was begun in 1973. This program has been devoted mainly to furnishing construction materials used by fairly homogeneous groups of local inhabitants, who plan and execute housing improvements for all members on a rotating cooperative basis. The members of each group-chosen initially in accord with the criteria of lot ownership, need for assistance, and availability for work-meet once a week to evaluate and plan their weekend work. At that meeting the particular improvement to be made is chosen in accord with criteria agreed upon in the group discussion—chiefly the urgency of the improvement and the nature of each member's contribution to the collective effort.

Cooperatives are also organized to search for materials such as lumber and sand on the outskirts of town, the aim being to use local materials and cut costs. The municipal government assists from time to time by making trucks available to transport supplies.

Despite the slow pace of construction—the only day the groups can work is Saturday—participation has been regular and efficient; in fact, though there might have seemed grounds for worry that a member whose own need was satisfied would cease to cooperate, no such occurrences have been observed.

The sanitation auxiliaries (there being no engineer in town) helped the groups to draw up plans, prepare the list of houses involved, select the best building site, find the best position in regard to sunlight, and—especially—determine adequate locations for the cesspool and well (an important but often neglected consideration) in accord with the traditional construction patterns.

#### Educational Activities

In addition to its other endeavors, the multiprofessional team participated in various educational activities at the local grade school and normal school. This work led to establishment of a sex education course for all grades, starting with the fourth grade. The aim of the course was to help provide more adequate preparation for marriage-since both direct observation and information from local religious leaders indicated numerous early and unsuccessful marriages together with adjustment problems in the home. The course was well-received by the students. However, there was some negative reaction from certain sectors of the community; this emerged in the form of parental complaints to the school administration and low-key articles in the local newspaper. It was thus in these relatively discreet ways that the more traditional sectors of the community showed the discomfort evoked by the conflict between the sex education course and established patterns of local behavior. This negative reaction, reaching the school administration through both direct and indirect channels, was an important factor in the team's decision to examine communication problems existing between the school administrators (coming from an urban setting where debate on such subjects was by then commonplace) and the local people (who had a more conservative orientation on the matter). Subsequent action limiting the sex education program to courses for prospective newlyweds promptly reduced the tension.

#### Conclusions

In the author's opinion, the following

general conclusions applicable to health activities elsewhere in Brazil's Amazon region can be drawn from the experience at Porto Nacional.

- 1) Community participation in health projects like those described is more than just a tool for helping to integrate the technical team into the local setting by improving mutual understanding between the team and the public. It also offers an alternative way of raising resources—that may otherwise be unattainable—for specific activities and projects.
- 2) Community participation should not be viewed simply as a means of accomplishing particular activities and projects. In the work described, stress was placed on enabling the population to identify and solve problems, the work *process* being emphasized in relation to the end result.
- 3) Such factors as centralization of the decision-making power or establishment of requirements by financing agencies for attainment of predetermined goals may preclude broad community participation, particularly at the planning level.
- 4) The degree of community participation is always affected by the way different social strata react to projects and activities; for this reason, no geographic community should ever be regarded as a socioeconomically homogeneous unit.
- 5) The heads of the health services (especially the directors of nursing and social services), as well as personnel in direct contact with the community, must abstain from partisan politics. This is necessary in order to keep health activities from being linked to any partisan political objective in the eyes of the community, and in order to assure various local leaders that the work is politically independent and is directed solely to the promotion of health.
- 6) In addition to the foregoing, positive involvement of local leaders—or at least an open and effective dialogue with them—is needed to prevent them from

feeling challenged and to encourage their participation and support.

- 7) A health service that enjoys high standing in the community and that is deemed capable of providing both technical guidance in planning community health goals and support for reaching those goals—that is, a well-established and technically qualified health service—is needed in order for intense and productive community involvement to be achieved.
- 8) It is necessary that at least the heads of the health service be employed full-time and devote themselves exclusively to their work, keeping themselves available to help with community endeavors.
- 9) Community participation can be stimulated in localities socially and culturally similar to Porto Nacional, and in this way the inhabitants can gradually be encouraged to change their attitude of passive anticipation concerning government services and their own general living conditions.
- 10) Finally, the authors' eight-year experience with active community participation in health work (through involvement of community leaders as well as through general public involvement), together with the relatively few problems they encountered, has led them to conclude that community participation is an invaluable resource, one which has been very seldom used by public health agencies in Brazil.

#### SUMMARY

This article describes community participation in a comprehensive eight-year health program implemented at Porto Nacional, a town located along a tributary of the Brazilian Amazon. After reviewing the main social, cultural, and health features of the area, it discusses in some detail how community participation was encouraged and how it contributed to health projects of various kinds.

The overall program was managed by a professional team composed of six physicians, a public health nurse, two social workers, and one educator, all of whom devoted their full time to the task. Under a contract with the state government, this team took charge of the main medical facility in the area—a 50-bed hospital—and proceeded to coordinate its work with that of other health agencies operating in the region.

The first community participation project was directed at reducing the town's infestation with vermin. This activity, besides making inroads against vermin and encouraging local participation in the work, provided a way for the team to make itself known and to become familiar with the community.

Other community participation projects followed. Boards of health, organized both at Porto Nacional and in neighboring communities, sought answers to local health problems through community participation. Health surveys based on community participation were carried out. A nutrition education and recuperation center for malnourished children—which made extensive use of community participation—was supported and partially financed by the community. A cooperative housing improvement program, based on intense participation by individual homeowners, was developed.

Conflicts—such as those generated by a sex education project—arose at times, but these proved fairly easy to resolve.

On the basis of this generally favorable eightyear experience, the authors have set forth a number of conclusions which they feel would be applicable to health activities elsewhere in the Amazon region.

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#### CORRIGENDUM

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On page 17 of the last issue, for the article "Improving Education and Research through the Pan American Health Organization and Education Foundation (PAHEF)," the footnotes indicating the authors' titles should be changed to read as follows:

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