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# REPORT ON HEALTH ACTIVITIES IN THE YANOMAMI AREA

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DEMINE - TOOTOTOBÍ - BALAWAÚ

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APRIL - NOVEMBER 1993

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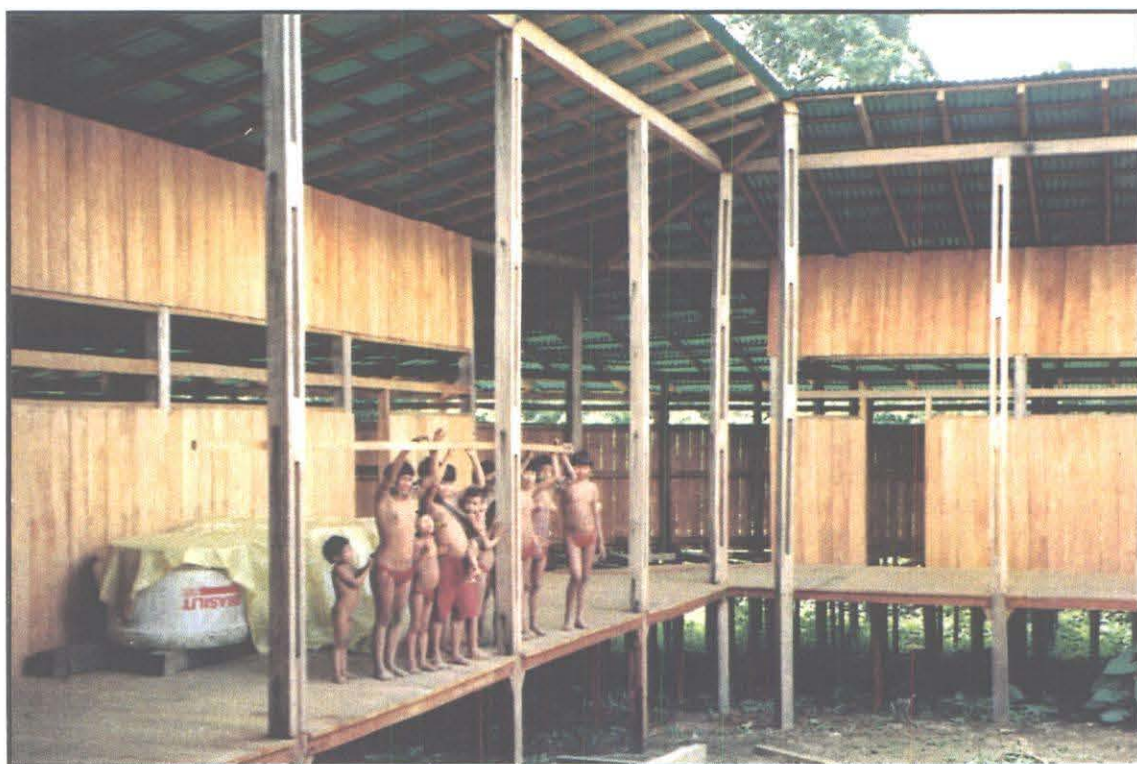
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CCPY  
Comissão pela Criação do Parque Yanomami

*Yano Post from the air (on the right)  
and detail of the interior*



Carlo Zacchini - November, 1993



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## INTRODUCTION

This report refers to health activities carried out by the CCPY Yanomami Health Project teams in the Demini, Toototobi and Belawaú regions between the months of April and June of 1993. Some parts of the health situation analysis and other factors relevant to the carrying out of the project refer to a longer period, dating from the setting up of the Project in March 1992. However, 1993 was the year in which our original objectives of controlling the principal diseases and organizing a system of attendance were consolidated.

The participation of the Yanomami in the project during these 20 months gave us a daily deeper understanding of the factors involved in the Yanomami health situation. The recent massacre of the Hwaximeutheri and the positions taken up by the Yanomami during the Roraima State Preliminary Conference on Indigenous Peoples' Health, underline the importance of an organized health system and the systematic defence of Yanomami territory as guarantees for their survival.

We believe that with the setting up of the Inter-Institutional Nucleus for Indigenous Peoples' Health (NISIR), formed by representatives from the indigenous peoples of Roraima and from non-governmental and governmental organizations providing health services, we will be better able to coordinate our efforts in improving the health situation of the state's indigenous peoples.

## DEMOGRAPHIC DATA

The number of Yanomami at present served by our project adds up to 1192, divided among 35 communities. Of these, 612 receive permanent and regular assistance, guaranteed by three health posts in the Demini, Toototobi and Belawaú regions. The remaining 580 people come from other regions where there is no health assistance (Venezuela), or from regions where there is some kind of health assistance (from FUNAI - the Federal Indian Agency, or from MNTB - the New Tribes of Brazil Mission), but who also come to us for health treatment. We should emphasize that these people who receive treatment every now and again are part of an even greater number who have been gradually approaching our health posts in search of treatment. In November 1993, 105 Yanomami in a precarious state of health arrived all at once at the Balawaú Post, and were treated by our local health team.

The population of the Toototobi increased 34% with the arrival of 76 survivors from the Hwaximeutheri (ex-Venezuela) community in August 1993.

The following chart shows the number of inhabitants per community in the regions served.

## AREA 15 - TOTAL YANOMAMIS SERVED BY PROJECT: 1192

### 1 - PERMANENT ASSISTANCE FROM CCPY

REGION	TOTAL POP.	COMMUNITY HOUSE	POP. PER C. H.
BALAWAÚ	223	BALAWAÚ	14
		EDUARDO	15
		HWAYASIKE	59
		KOREHEBI	36
		RAHARABI	14
		ROBERTO	21
		UXIXIMABIU	29
		XAKIBI	15
		XOTOKOMABI	20
DEMINI	89	WATORIK	89
TOOTOTOBI	300	FIALHO	48
		HWAXIMEU	76
		MAKOS	39
		PAULINO	47
		TOTÔ	90
3 POSTS	612	15 COMMUNITY HOUSES	

### 2 - SPORADIC ASSISTANCE IN OTHER COMMUNITIES

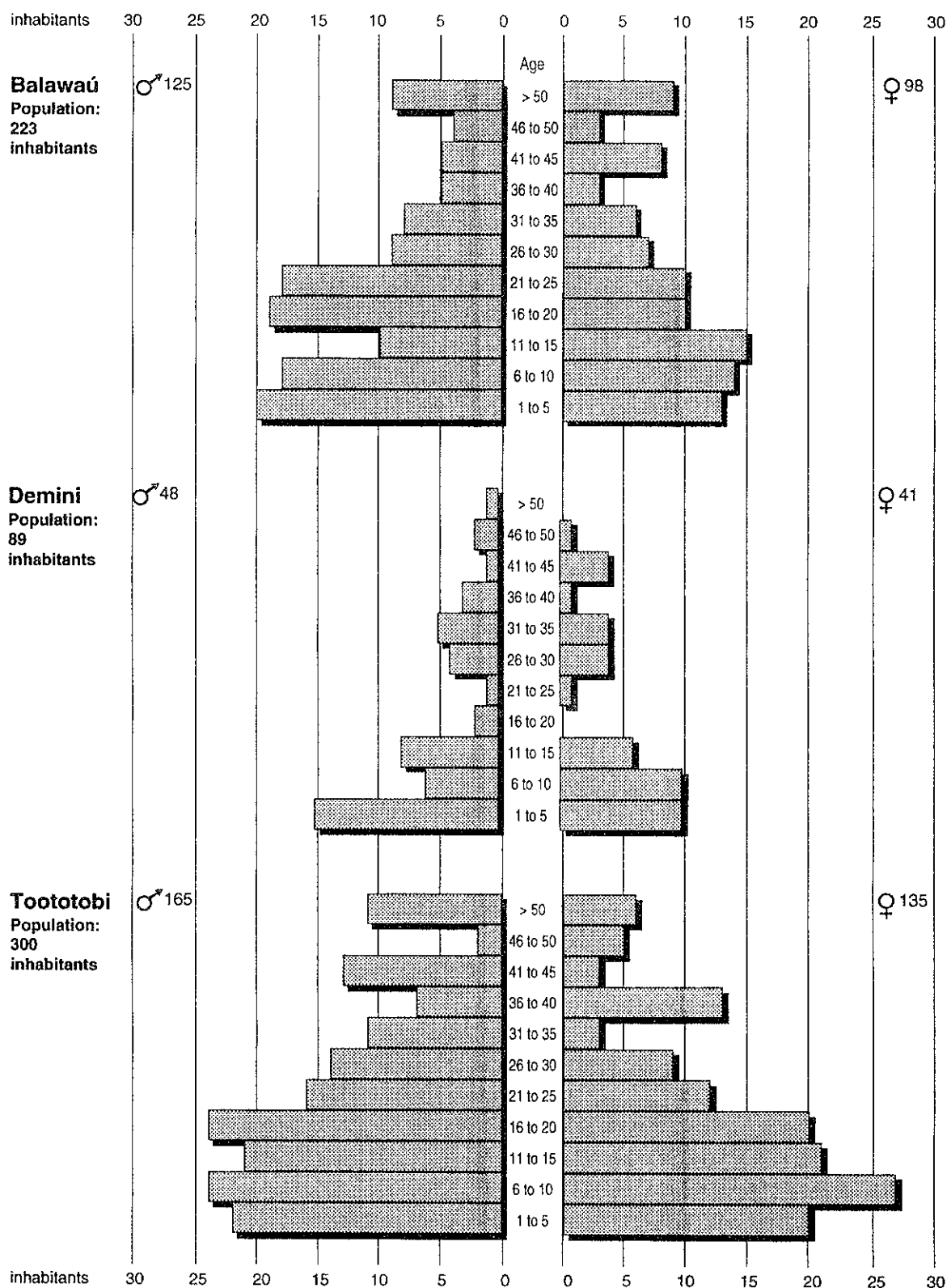
REGION	TOTAL POP.	COMMUNITY HOUSE	POP. PER C. H.
TARAÚ	151	WEYUKUTHERI	22 (CI)
		XIHOMETHERI	70 (CI)
		MAXABABITHERI	59 (CI)
AJURICABA (FUNAI/AM)	64	ITON	64
ARACÁ (MNTB)	96	KEBROBE	96
NOVA DEMINI (MNTB)	120	ANTONIO CANTUÁRIO	60 (CI) 60
VENEZUELA	149	MANAKARIUTHERI	36 (CI)
		ORINOKUTHERI	25 (CI)
		MAAMAROHABROBE	20 (CI)
		YEHIOBITHERI	12 (CI)
		MAAMABITHERI	12 (CI)
		TOMOKOXBOTHERI	12 (CI)
		HUXIMATHERI	11 (CI)
		RIAWEKITHERI	8 (CI)
		DEXAMUTHERI	7 (CI)
		HABAKAKITHERI	4 (CI)
		SIMOKOTHERI	2 (CI)
		HYOMOSITHERI	(CI)
5 REGIONS	58	20 COMMUNITY HOUSES	

CI = Incomplete census

Note: There is no complete up to date census for the Taraú and Venezuela population who have received treatment from CCPY.

The following table shows population distribution according to sex and age for each of the regions receiving permanent assistance.

## AGE PYRAMID





By analyzing these tables, we can see that the population of children under ten years of age is 46% in the Demini, 31% in the Toototobi and 29.15% in the Balawaú. Women of child-bearing age (between 15 and 35) are 8.9% of the population in the Demini, 15.6% in the Toototobi and 14% in the Balawaú.

The high child population in the Demini, although combined with the lowest percentage of women of child-bearing age, compared to the other regions, is possibly the result of having received medical assistance for a longer period and on a regular basis, perhaps contributing to an increase in fertility as well as a decrease in infant mortality.

During 1993, we recorded a total of 33 births, which caused a high general birth coefficient (CNG):

$CNG = 53.9$

9 deaths also occurred among this group, the cause of death being:

- 2 cases of cancer
- 2 cases of pneumonia
- 2 unknown causes
- 3 infanticides

The two patients who died of unknown causes received no medical attention as they were away from home at the time. The health personnel recorded the deaths upon the groups' return without, however, being able to identify the medical cause of death as opposed to the Xaman's interpretation of the cause of death.

# EVALUATION OF THE HEALTH SITUATION DURING 1993

## 1. INTRODUCTION

The Yanomami, like other ethnic groups who have lived in isolation and only recently had contact with our civilization, run high health risks with the introduction of diseases to which they have low resistance such as tuberculosis, Visceral Leishmaniasis, infections caused by virus (influenza, measles, hepatitis, chicken pox, mumps etc.), or, in the case of malaria, from the lowered immunity caused by the disease itself. Other health problems, probably in existence before contact, such as intestinal parasites and diarrhea, have contributed to lowering resistance, so that the Yanomami now face an extremely serious health situation, running the risk of extinction from epidemics of disastrous consequence.

However, it is not only disease which threatens the Yanomami. Weakened by disease, they are unable to fight for survival pursuing traditional activities such as hunting, fishing, forest harvesting and planting small fields. Together with disastrous changes in lifestyle brought by gold prospectors invading their territory, these factors have combined to form a picture of malnutrition and general sickness leading inevitably to suffering and death.

## 2. MALARIA

Two species of Plasmodium are found in Yanomami territory: Plasmodium vivax and Plasmodium falciparum. Despite the recent decrease in incidence in the whole of the Yanomami Health District, malaria has continued to be the principal cause of death over the last few years. We have observed that in other regions of the Yanomami area where there is no permanent medical assistance and where the disease has been temporarily brought under control by a visiting health team, after a few months absence the incidence of malaria returns to its previous high levels, causing countless deaths.

For this reason, using methodology created by the technical team of the Yanomami Health District (see appendix 9), we have tried to carry out monthly check ups of the target population, with complete treatment for positive cases as well as meeting the demand that arises with our visits to the communities or in the health posts.

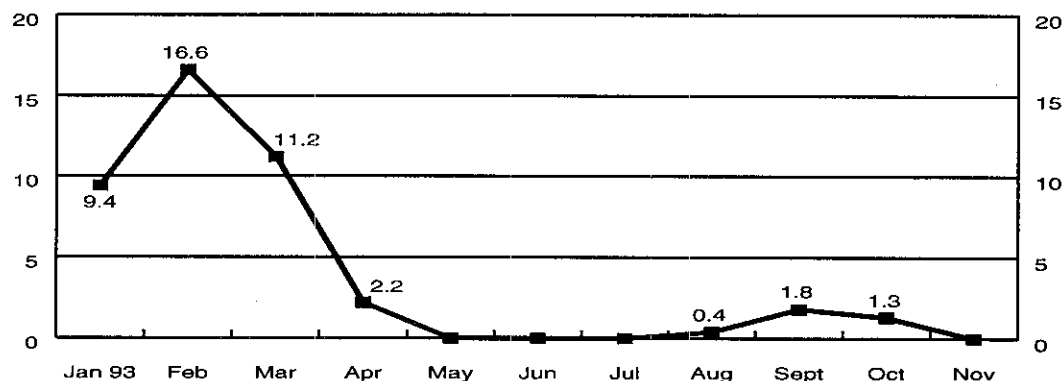
Between January and November 1993 we carried out a total of 2,924 slide tests for malaria, obtaining the following results:

	BALAWAÚ		TOOTOTOBI	DEMINE
	Perm. Assist.	Sporadic Treatment		
Malária Vivax	8 cases	9 cases	32 cases	3 cases
Malária Falciparum	88 cases	1 case	2 cases	2 cases
Malária Mista	0	0	1 case	0

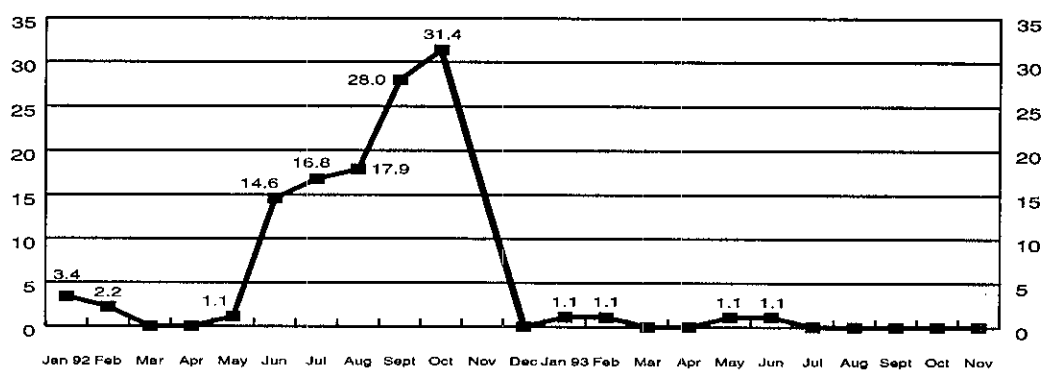
Monthly percentages of malaria cases per region are shown in the following graphs (graphs 1, 2 and 3).

## MONTHLY PERCENTAGES OF MALARIA CASES

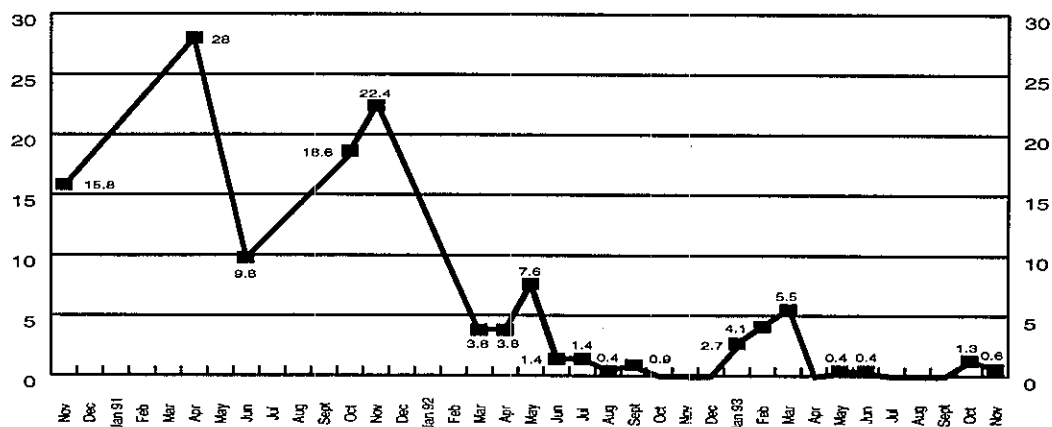
Graph 1: Balawaú - Permanent Assistance - Jan / Nov' 93



Graph 2 - Demini - Jan' 92 / Nov' 93



Graph 3 - Toototobi - Nov' 90 / Nov' 93



★ The percentage calculations were based on the populational variation during the period.  
From September '93, the population of the Hwaximeutheri who migrated to the Toototobi have been included.

It can be seen that the average percentage of incidence shown in the 3 regions with permanent assistance was 0.22% over the last 11 months, which represents a significant drop when compared to the annual average before the establishment of the project (25.3%).

We attribute the greater incidence in the Balawaú region at the beginning of the year to the following factors:

- the high concentration of Indians in the vicinity of the health post at the time of the building of the airstrip;
- occasional trips by Indians to regions where there is no permanent health assistance;
- occasional delays in conducting the monthly field check up due to difficulty of access to the region's communities and
- invasions of neighboring areas by gold prospectors.

The population attended to occasionally at the Balawaú post, coming principally from Venezuela, showed a higher incidence of malaria (26%) (see graph 10), probably because of the lack of regular medical assistance in their area of origin.

All cases of malaria were fully treated according to the norms (see appendix 9) established by the technical management of the Yanomami Health District, with no cases of complications or resistance observed.

### 3. INFLUENZA

The constant flu epidemics registered throughout 1993 in the three regions (Demini, Toototobi and Balawaú) caused great hardship and suffering to the communities, and represented a serious challenge to the health teams. The naturally low resistance to the flu virus due to only recent contact with the surrounding society means that the impact of the disease is much more serious than in other population groups, as well as affecting virtually 100% of the population during an epidemic.

Around 20% of the diagnosed flu cases developed bacterial complications, usually pneumonia, requiring the use of antibiotics. Some cases of streptococcus pharyngitis, middle ear infections and sinusitis were also registered as complications.

As can be seen from the diagrams showing the occurrence of the principal diseases in the three regions, cases of flu and its attendant complications accounted for approximately 70% of treatments.

In order to treat these epidemics and their complications, the health teams stayed in the communities for several days, providing full treatment and accompanying the more serious cases that appear during the epidemic's course. Some degree of bronchial congestion was observed at some stage in nearly all cases, the symptoms being treated with bronchial inhalers.

Apart from the suffering caused by the illness' symptoms, the individual loss of health and the damaging effect on collective work to sustain the community, the flu exerts an extremely negative psychological effect on the Yanomami. Considered from their point of view as "xawara", that is, an epidemic illness, like all the others, caused by the curse of a distant enemy, perhaps the collective consciousness of inferiority and vulnerability justifies, apart from purely medical reasons, the general listlessness and apathy found among the Indians in these circumstances. This leads to exaggerated expectations about and demands for medicines, mainly in their injectable form, far beyond what would be reasonable for normal therapeutic use. Thus the importance of constantly informing the Indians about the correct use of medicine, which do not work, unfortunately, as a panacea.

The flu viruses are introduced into our area by various means. The constant trips of the Indians to visit other regions which have contact with the periphery of the area, and the presence of non-Indian outsiders such as health teams, the military, journalists, the federal police, politicians, anthropologists and other visitors, have been the usual observed form of infection.

We believe that at present stage of contact of the Yanomami it would be impossible to re-establish the isolation of this population. Therefore severe vigilance and immediate assistance when the epidemics occur are essential. In the future it is to be hoped that the development of acquired immunity will reduce the seriousness and extension of this infection.

The feasibility of vaccinating the Yanomami population of the area against the influenza virus is being studied as a way of minimizing the risks and the deaths caused by the various flu attacks.

#### 4. VISCERAL LEISHMANIASIS

Visceral Leishmaniasis has been introduced by gold prospectors in various regions of the Yanomami territory. In our area of work, one case of Visceral Leishmaniasis has been diagnosed in a five year-old child in the region of Balawaú. Diagnosis was based on the symptoms presented, a positive blood test and a spleen sample taken in the area.

Full treatment with Glucantime was carried out within the Indian area itself, entailing considerable effort on the part of the health teams to prevent the child's removal to Boa Vista or the ceasing of treatment. The symptoms regressed and a clinical reevaluation of the case was programmed for every three months.

The discovery of this Visceral Leishmaniasis case justifies greater investment in investigating this illness in our area, considering that for every case with obvious symptoms, there are likely to exist another four or five with milder symptoms. Of these, 70% develop into serious illness. Research should also extend to testing dogs for positive blood samples, the animal being the principal transmitter of the disease.



## 5. TUBERCULOSIS

Tuberculosis is a serious health problem in some regions of the Yanomami territory.

The naturally low resistance of this population to the tuberculosis bacterium and the relatively recent introduction of the disease has resulted in its taking an epidemic form, with symptoms showing a more serious manifestation. Symptoms most commonly observed in cases removed to the Casa do Índio (Indian "Hospital") in Boa Vista were of generalized tuberculosis.

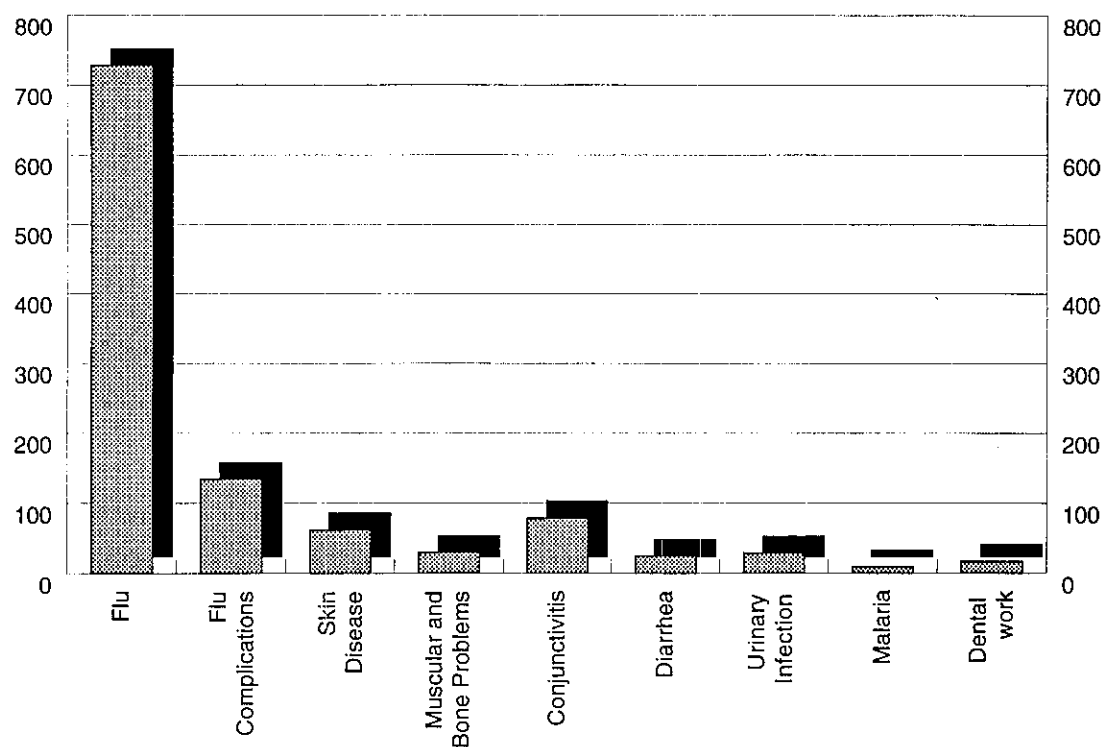
In our work region no cases of tuberculosis were diagnosed during 1993, in spite of some suspect cases which proved negative.

In virtue of the low natural resistance, we have decided to inoculate the population with the intradermal BCG vaccine, following the policy of the National Program for Tuberculosis Control, in order to try to increase resistance and diminish the incidence of the generalized and localized forms of the disease.

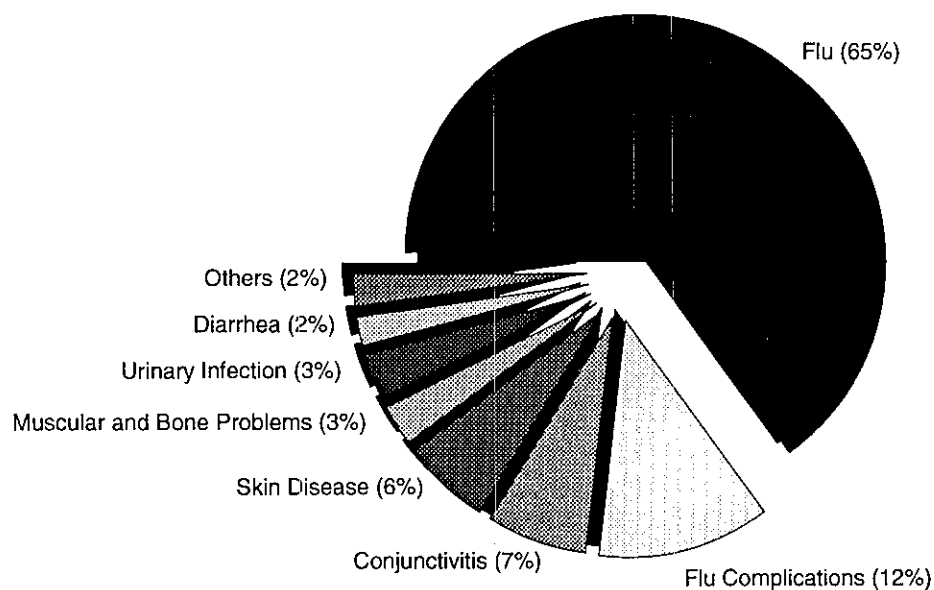
BCG vaccination of our target population remains incomplete, and further reappraisal of what has already been accomplished is necessary, with a subsequent completion of the program.

## TOOTOTOBI - INCIDENCE OF DISEASE APRIL TO NOVEMBER 1993 - 1113 CONSULTATIONS

Graph 4 - Absolute Numbers

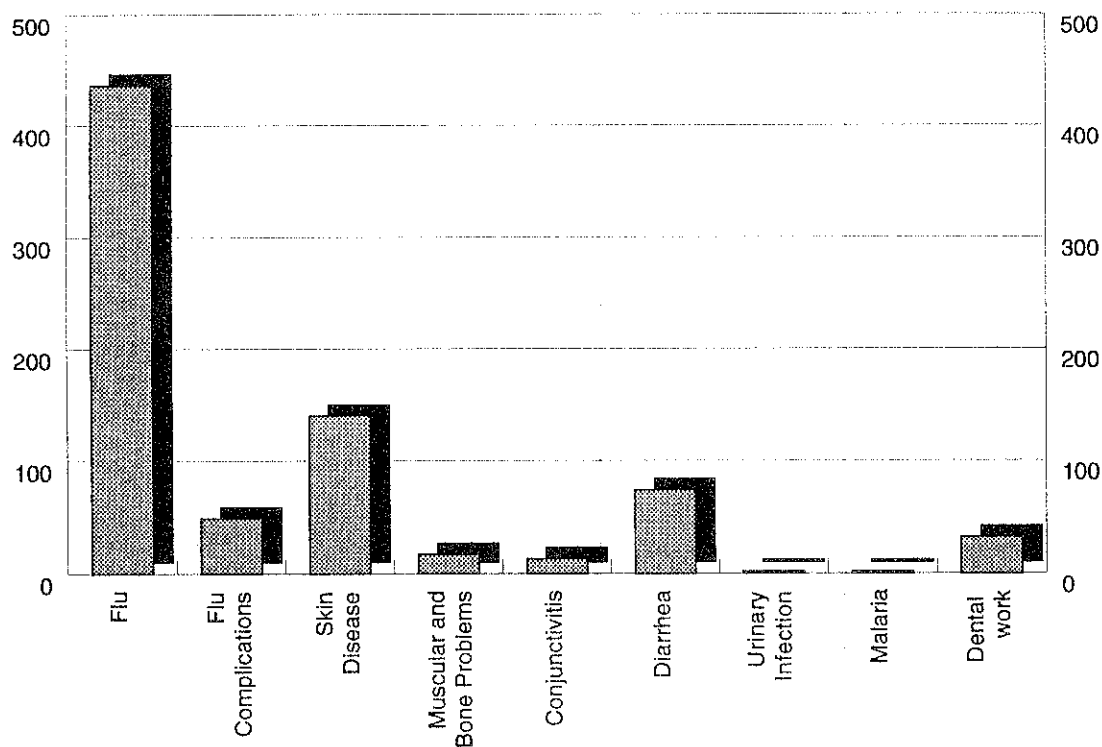


Graph 5 - As a percentage

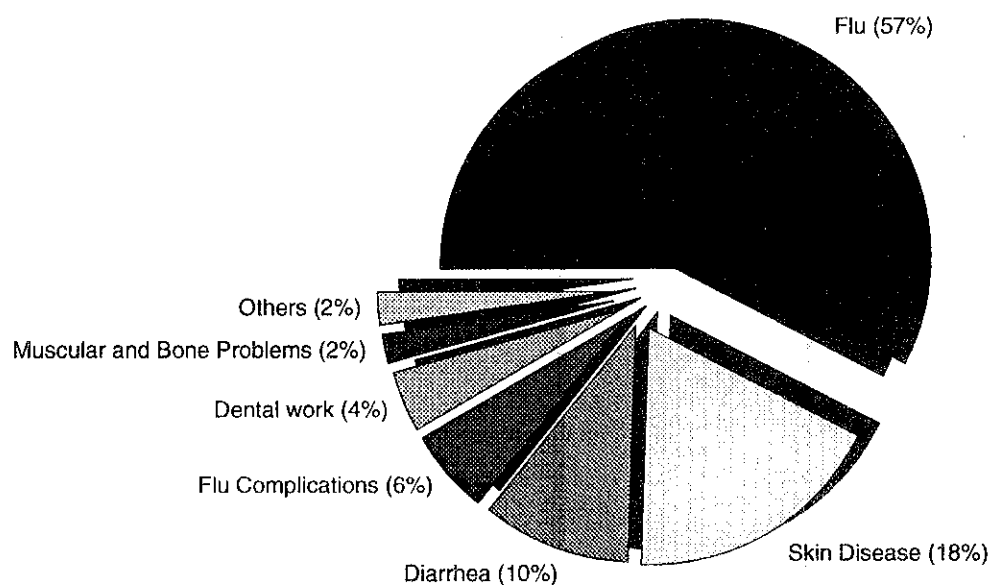


## DEMUNI - INCIDENCE OF DISEASE APRIL TO NOVEMBER 1993 - 765 CONSULTATIONS

Graph 6 - Absolute Numbers

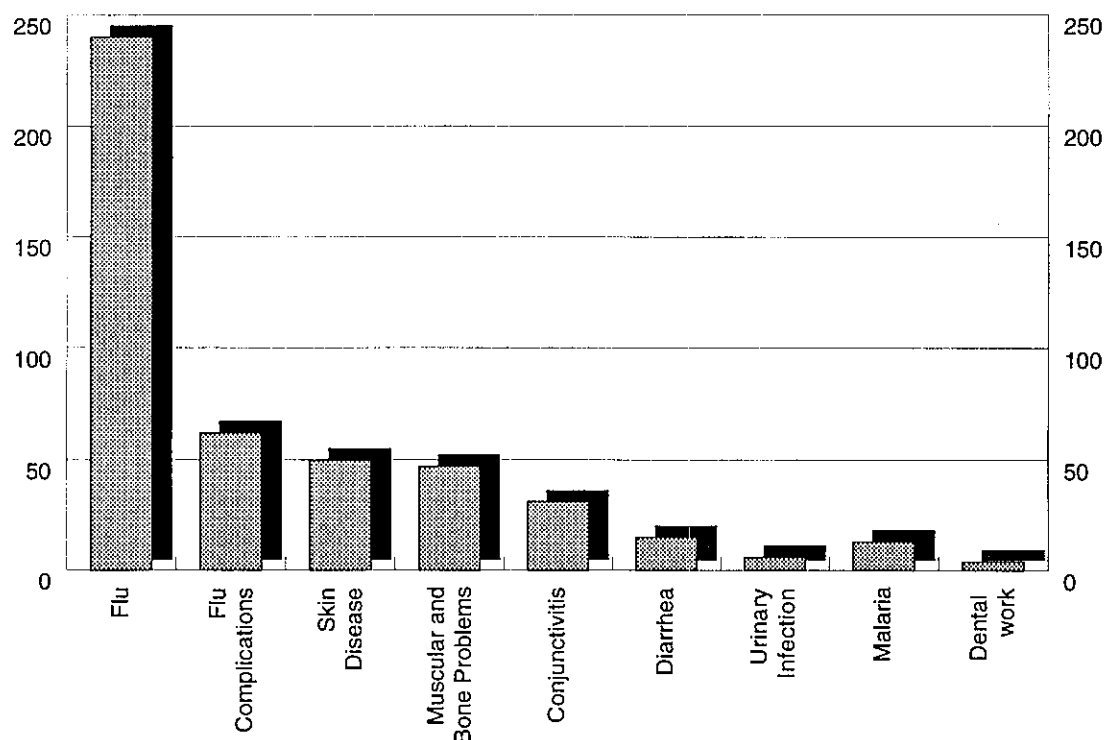


Graph 7 - As a percentage

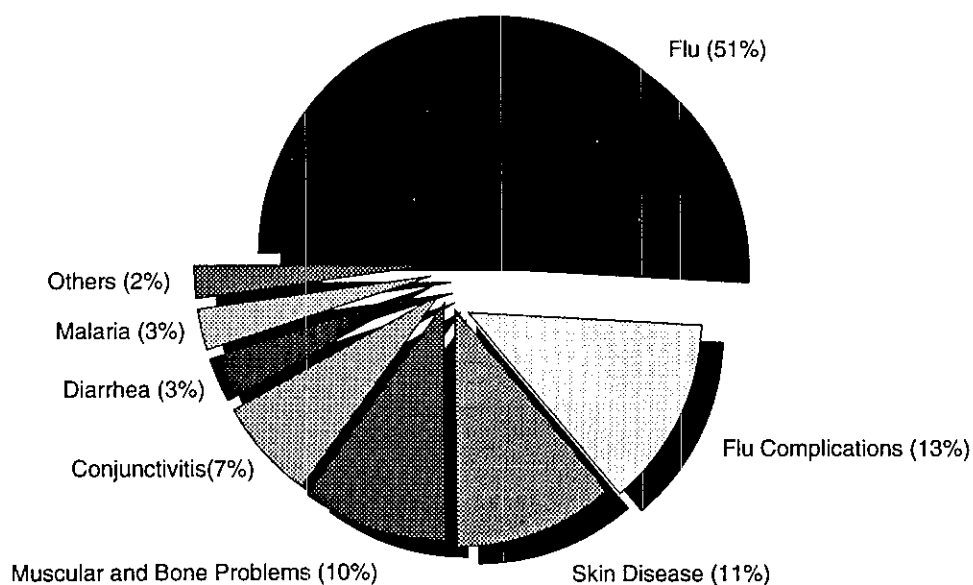


## BALAWAU - INCIDENCE OF DISEASE APRIL TO NOVEMBER 1993 - 468 CONSULTATIONS

Graph 8 - Absolute Numbers

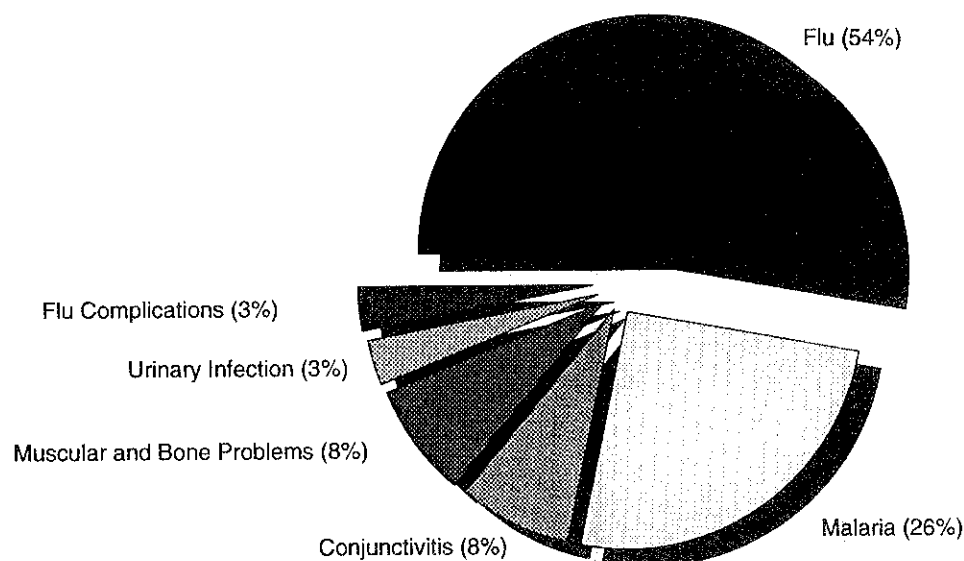


Graph 9 - As a percentage



## BALAWAU - INCIDENCE OF DISEASE APRIL TO NOVEMBER 1993 - SPORADIC CONSULTATIONS

Graph 10 - As a percentage



## COEFFICIENTS OF WEEKLY INCIDENCE CIS = NUMBER OF CASES ÷ EXPOSED POPULATION JUNE TO NOVEMBER 1993 BY REGION

	Demini Pop.: 89 inhab.		Balawaú Pop.: 223 inhab.		Toototobi Pop.: 224 inhab. Jun-Aug '93 300 inhab. Sept-Nov '93 after migration of Hwaximeutheri	
Disease	Total	CIS Jun-Nov '93	Total	CIS Jun-Nov '93	Total	CIS Jun-Nov '93
Flu	285	3,20	168	0,75	468	1,70
Flu Complications	36	0,40	42	0,19	75	0,27
Malaria	1	0,011	8	0,036	7	0,024
Diarrhea	64	0,72	12	0,053	20	0,072
Conjunctivitis	12	0,13	27	0,12	62	0,24
Visceral Leishmaniasis	0	0	1	0,0045	0	0



## ACTIVITY DEVELOPMENT IN THE AREA

A medical team of 10 people is responsible for providing permanent health care to the populations of the Demini, Toototobi and Balawaú regions, consisting at present of:

- 1 doctor
- 2 nurses
- 4 nursing assistants
- 2 microscope operators
- 1 general services assistant

With the inclusion of another nurse scheduled for January 1994, the ideal number of professionals in the area will have been reached.

The more frequent presence of the doctor in 1993 assured an improvement in the quality of health care, whether in direct assistance to the Indians or in training the nursing team in standard procedures and general orientation of activities.

The method of working adopted since the beginning of the project is based on regular visits to the communities, with a monthly check in the field for malaria and occasional consultations on demand in the health posts.

A total of 2,238 consultations were registered in the three regions in 1993, with work being mainly geared to taking care of the frequent flu epidemics, as has already been noted.

Blood tests for Visceral Leishmaniasis and mucus tests for tuberculosis and other clinical examinations were carried out in the field and sent to the Indian "Hospital" in Boa Vista, with only one case of Visceral Leishmaniasis being confirmed. One suspected pulmonary tuberculosis case was removed to Boa Vista, subsequently diagnosed as being pneumonia with pleural complications.

Mass treatment for worm infections was carried out in the three regions at least twice in the last eleven months.

No vaccinations were carried out in this period. This program will be carried out in conjunction with other regions of the Yanomami territory, to be coordinated and planned by the Yanomami Health District in 1994.

Dental consultations were carried out once over a period of 15 days in the Demini region. Preventive treatment with applications of fluoride over the last two years in this region have probably been responsible for the improvement in carie incidence in the population, which in 1990 showed an average CLF (caried, lost and filled) rate of 4.7, falling in August 1993 to 1.9 (see appendix 5).

## PARTICIPATION OF THE INDIGENOUS POPULATION

After almost two years spent developing our work with the Yanomami we are now able to observe perceptible changes both in the Indians' relationship to the project and in our concept of the project in terms of the Indians.

From the start, approximation to our teams was hotly contested by the local leaders in each of the three regions. Consultations and priorities in community visits were sometimes decided on the basis of orientation from these leaders. In this way, communities sympathetic to these leaders formed alliances which ended up to some degree influencing the extent of the project's activities. Non-allied groups, generally from more distant regions, ended up having less consultations, limited not only by our over-stretched personnel, but also by the difficulties in arranging travel companions for these visits. Even so, we were able to reach these more distant regions with cooperation from the leaders, who also helped by sending messengers at our request so that communities were able to travel to nearer regions for treatment.

At the beginning, it was utterly necessary for us to use interpreters, usually from other communities, not only to surmount the communication barrier, but also to gain acceptance from the other Indians. With time, the interpreter's attendance became more sporadic, due to activities connected to subsistence, family obligations and inter-group tensions. This underlined our need to learn the language and also necessitated a more participatory collective effort on the part of the Yanomami to make themselves understood.

Mainly unmarried adolescents who worked for us at the beginning as porters to the communities, especially to reach the Balawaú region before the construction of the airstrip, became for a while the most interested in and best informed about the project, and also most interested in learning Portuguese. They also received more goods as payment for their work as porters and interpreters. Today these adolescents form two almost formalized groups, with occasional alterations, one each in the Balawaú and Toototobi regions, who remain eager to accompany us, greatly facilitating our work. However, in spite of constituting a group worthy of future investment as health monitors, we realized that the attention given to this group was compromising the traditional socio-hierarchical relationships, since our contacts with the chiefs were much more a matter of political formality than an effective participation in daily health questions.

For the maintenance of the airstrip and re-roofing of the health post in the Toototobi region, and for construction of the airstrip and for help in carrying timber used in the construction of the new health post in the Balawaú region (see appendix 7), we were able to discuss Indian participation in the maintenance of the physical structure of the project.

The form and quantity of payment for these services was discussed with the Indian chiefs, who also carried out the distribution of the goods. In the case of the Demini, where health teams have been active for longer, this kind of service is no longer remunerated due to the Indians' understanding, through the influence of Davi Kopenawa, that the Post belongs to them and that they are therefore responsible for its upkeep.

However, the whole question of exchanging goods from our society such as knives, axes, machetes, fish hooks and line upon which the Indians have already developed a certain dependence, needs to be more thoroughly analyzed. We realize that our relationship with the Yanomami depends on an understanding of their customs and way of life and for this reason the practice of paying for services rendered needs to be questioned. Certainly the giving away of these goods is not compatible with maintaining the Indians' autonomy, however an answer to this question needs to be found in conjunction with the Indians.

Our field work has caused an interesting confrontation between the systems of health care. The Yanomami recognize that they have no treatment for the diseases introduced by the white man. In these cases, our presence and treatment have always been accepted and sought after, although treatment in conjunction with the shamans has never been excluded.

Nevertheless, a clash between the two systems is inevitable. Our own respect and encouragement of traditional therapies, together with a policy of non-interference, has not been sufficient to prevent an overvaluing of our system in certain instances. It is not uncommon that some Yanomami have sought treatment for minor problems that previously they were quite able to solve themselves, such as extraction of foot worm, disinfecting small cuts and asking for honey for coughs, etc. A common practice is seeking the use of medicine, often in the form of injections and drips, which, even though used by us only when absolutely necessary, have come to be seen as being almost miraculous in their power to cure. Although our practice has never been to use doses above those recommended, in the flu and diarrhea epidemics we have been greatly pressured by the Yanomami to use larger than necessary quantities of medicine. At these times, we have used the opportunity to practice some informal health education, explaining how our medicine works. Nevertheless, a more effective anthropological approach would be of great value at this stage of the project.

At the preliminary state conference on Indigenous Peoples' Health, held by us in the Toototobi region (II Conference of the Yanomami of Area 15) in October (see appendix 1), together with the Indians, we set out to appraise and rethink our work with them. This was a highly useful opportunity to bring this type of questioning into the open, in a preliminary, collective fashion. We have arranged with the Yanomami to make this meeting an annual event, to be held at the beginning of each dry season. Next month, we intend to dispatch three tape recorders to the area together with three copies each of the five cassettes recorded at the meeting. In this way points raised can continue to be discussed with those Yanomami unable to attend. A "representative" was elected from those present to represent them at the state conference in Boa Vista and also ended up going to the National Conference on Indigenous Peoples' Health held in Luziânia, Goiás state, at the end of October. The presence of survivors from the massacre of July 1993 of the Hwaximeutheri (when 16 were killed and 4 injured by Brazilian gold prospectors just over the border in Venezuela), and now resident in the Toototobi community, brought home to those present the necessity for union in the face of outside threat.

## PROJECT ORGANIZATION IN BOA VISTA

Six people work in the Boa Vista office providing logistical support and management for the project. These are:

- 1 health coordinator (doctor)
- 1 health coordination assistant (nurse)
- 1 office manager (business administrator)
- 1 administrative assistant (university student)
- 1 office assistant
- 1 driver

A founding member also works as a volunteer providing help in questions relative to the field (airstrip and health post construction) and in administration.

The planning of field activities, the timing of team community visits and control and dispatching of medicines and equipment is all accomplished based on monthly health reports sent in from the field and from daily radio contact with the teams in the Yanomami area. This has been considerably improved recently with the computerization of the office, facilitating control of pharmaceutical supplies, standardizing therapies and reports and the individual forms which compose our data bank (see appendix 8). General information on health, patient files and census information arriving from the health posts are loaded into the computer data bank in Boa Vista, then returned to the field, improving office-health post and inter-health post communication.

The contracting of health professionals is done by the project doctors. In June nurses were selected with the help of the Manaus School of Nursing to take up places in the project. People from Boa Vista and Manaus were given priority due to the special working conditions, duration of service and distance from family etc. Together with improvements in working conditions, this has resulted in a more stable team composition than in the previous year.

Duration of service was altered as of April 1993 (see appendix 4), professionals now staying 60 days in the field, with 20 days leave in between. 10 days are spent in the office before each new field entry in order to discuss problems faced in the field, to better understand office work, and for the holding of theoretical discussions and short term technical training courses in Boa Vista (laboratory technical training and endemic disease control).

We have a fortnightly flight between Boa Vista and the Yanomami territory for the arrival and departure of health professionals and for the dispatch of medicines, food and equipment etc.

Medicines and consumer goods used in the last seven months have basically been supplied by FNS (the government National Health Foundation), CEME (the government medicine distribution service) and the state health secretariat of Roraima. We also received a considerable donation of basic pharmacy items from UNICEF in September 1993. This practically eliminated the need to buy drugs on the commercial market.

The office in Boa Vista has been the link for communications between the field operations and our head office in São Paulo. In spite of daily contact via fax and telephone and occasional visits from members of the organization, the dynamic of our work in the area necessitates a flexibility in decision-making not afforded by the present lack of autonomy of our Boa Vista office. We feel certain that in questions relating to the health project, the consulting firm contracted for the internal restructuring of CCPY will be of great benefit.



## CONCLUSIONS

Despite the difficulties found in setting up and developing the Project, such as building basic infrastructure, contracting and training personnel and system organization, an analysis of the health situation of those Indians in our regions of operation allows us to conclude that we have been able to revert the emergency situation found on arrival.

Nevertheless, as already set out, the Yanomami continue to be extremely vulnerable to new epidemic outbreaks due to their isolation and to the constant threat of the introduction of diseases new to them. Continuous health assistance, in our opinion, is the only way of maintaining favorable collective health statistics, as proven by the differences observed between those Indians receiving permanent care and those having only occasional consultations.

Effective integration of the Yanomami into the project and preoccupation with encouraging their own abilities in preserving health are vital points to be considered in the development of any future projects aimed at ensuring the survival of the Yanomami.

## APPENDICES

# PRELIMINARY STATE CONFERENCE ON INDIGENOUS PEOPLES' HEALTH

## II CONFERENCE OF THE YANOMAMI OF AREA 15

Toototobi, October 12,13 and 14, 1993

### 1 - THE PREPARATIONS

The idea for this conference arose during meetings held at the NISIR (Inter-Institutional Nucleus for Indigenous People's Health of Roraima) to discuss preparations for the 1st. state conference on Indigenous Peoples' Health which was to be held in Boa Vista on October 15,16 and 17, 1993. On these occasions, it was decided to hold discussions with the Yanomami about various items on the agenda and to choose the delegates that would represent them at the state and national conferences.

Operational difficulties involved in holding one meeting for representatives from all the regions led the Yanomami Health District to hold a preliminary conference with the Yanomami of the Surucucus region, with the NGOs assuming responsibility for indicating or sending representatives from the sub-regions.

In a scheduled meeting in CCPY's Boa Vista office, the possibility of also holding a preliminary conference with the Yanomami of our area of operations was evaluated. The FNS (National Health Foundation) cooperated by providing three flights and food assistance (rice and flour).

We therefore began calling the communities by radio one month in advance of the meeting. We talked about what was expected from the meeting, and the idea of some Yanomami that the whole thing would be a party was quickly dismissed. When it was realized that our work would be appraised and that we were open to criticism and suggestions, the Indians decided that women and children would not participate, only the elders and chiefs.

We suggested that the meeting be held in the Toototobi community due to its location and the condition of the airstrip. The Indians themselves of the Toototobi and Balawaú decided via radio that between the health post and a community house, the house of Toto offered better accommodation, being the largest in the region.

Marcão and Abrão talked with Roberto at the Yano Post who sent messengers to the community lodges of the Balawaú and the Novo Demini.

Claudio and Jorge talked to Toto at the Toototobi lodge who notified the community lodges of this region and sent messengers to the Novo Demini. As host, Toto offered to provide the game for the three days of the meeting.

Davi of the Demini was to send representatives, but because of an outbreak of flu nobody was able to come.

Carlo contacted the Catrimani, who also receive dental consultation from CCPY.

On October 12, 1993 Carreira and José of the Catrimani and Roberto of the Balawaú arrived by plane. They were lodged in the Post that night, together with the representatives from the communal houses of the Novo Demini who had arrived the previous day.

The next day, ceremonial paint and decoration was applied and entry into the communal house followed the traditional ritual for a ceremonial gathering. Songs were sung until the break of day.

## II - THE PARTICIPANTS

In total, 176 Yanomami attended, representing 16 community lodges, some several days' walking distance.

### A) YANOMAMI:

#### Region: TOOTOTOBÍ

Community	Representatives
TOTÔ	All
FIALHO	Fialho, Bilo, Aroldo, Rogel, Liko, Adalto
PAULINO	Paulino, Carlos, Alfredo, Braga, Tomaxi, Ivaldo, Matos, Sarnese, Abel, Antonio
MAKOS	Makos, Kirião, Tião, Miguero, Keny, Yatotorine
HWAXIMEUTHERI	Ararão, Chico, Serra, Paulista, Donato, Aturian

#### Region: BALAWAÚ

Community	Representatives
BALAWAÚ	Chefinho, Walmir
ROBERTO	Roberto
HWAYASIKETHERI	Rui, Makusu, Boroba, Bisiwe, Josua, Afonso
KOHEREBITHERI	Wabunau, Vitor, Atabai
RAHARABITHERI	Mamokewaroboma
XOTOKOMABITHERI	Miudo, Sirado

#### Region: NOVO DEMINI

Community	Representatives
ANTONIO	Antonio, Levi, Eli, Mateus, Reinaldo, André
CANTOÁRIO	Cantoário, Cachaça



**Region: CATRIMANI**

<b>Community</b>	<b>Representatives</b>
MAUXIUTHERI	Carrera
WAKATAUTHERI	José

**Region: VENEZUELA**

<b>Community</b>	<b>Representatives</b>
MAAMABITHERI	All

Note: Representatives' families (women and children) were also present.

**B) HEALTH TEAM:**

Carlo Zacchini - interpreter  
 Claudio Esteves - doctor  
 Deise Alves - doctor  
 Jorge André - Nursing assistant (Toototobi)  
 Marcos - microscope operator (Balawaú)  
 Saldanha - Nursing assistant (Demini/Balawaú)

### III - THE MEETING

What follows is based on the transcription made after Carlo's translation of each Yanomami speech. At our request, Carlo also translated the health team's comments into Yanomami. This section should be completed by Carlo, who recorded 5 cassette tapes of the meeting.

**Carlo** explained the reasons for the meeting.

**Toto** spoke about the spirits that the white men see and treat by drawing out of the body and of other spirits that only the shamans know about. "The white men know when it is falciparum, vivax, pneumonia, flu or tuberculosis and make the medicine". "I'm not speaking for just my own people" and proceeded to name all the lodges present. He spoke of how the Indians should relate to the white men who treat the diseases: that they should be well treated and that the Indians should ask for explanations of what they are doing so that the Yanomami can better understand.



**Carlo** spoke of the time of the gold prospectors and told how malaria had lessened once they had left the area and since the health project had started. He spoke of the constant flu epidemics and their treatment.

**Toto** spoke of his own role in getting the project to come here. And how he had asked the white men to come. He said he was extremely worried about the decrease in the Yanomami population, how he wanted them to increase and be strong, and to stop the practice of infanticide. He told of his experience when at the Indian "Hospital" in Boa Vista.

**Carlo** emphasized that Davi and Roberto had also played an important part in bringing the health project to the area.

**Toto** said that before, everyone had accompanied the gold prospectors, but now they wanted them out of their land. He said that when it was necessary the doctors had to be called, as he had done. If the whites wanted to come visit, they only had to speak to him.

**Roberto** said that the whites at the Yano health post were ignorant and their medicine only consisted of water which didn't solve anything. He added that they were fun but didn't give enough medicine. Rehydration mixture was not enough to cure diarrhea. He added that some whites, such as Marcão, gave strong medicine. He also agreed that the Yanomami should not practice infanticide, even "in the case of a girl child".

**Carlo** explained the importance of oral rehydration in the case of diarrhea and of other oral medicine in solution. He explained how medicine worked in injection and pill form, when they should be used and the risks involved.

**Makos** "Before the shamans tried hard but couldn't always cure illness. They took a lot of yakoana (a sacred hallucinogenic drug) and the children died, but now they can take less yakoana and together with the white man's remedies the children are soon running around again. I like Jorge, the assistant nurse, who defends the women when other Yanomami don't". (Referring to an incident when, under the influence of excessive inhalation of yakoana, the Yanomami Tião went for the women with an ax. Jorge, the assistant nurse, helped to control Tião). Makos said he was happy.

**Fialho** said that he'd also helped in setting up the project. He'd also brought the whites here, and was happy about that. "I don't know where the evil comes from, but the white men find out by looking at the blood, they can see it; before we agonized about where it came from, now we're calmer about it. I feel affection towards you who are taking care of these things. I don't want people to come here just to talk. I want people who can wipe out the evil. We are still few and we have a lot of work ahead of us if we want to be one day like the whites. Those who come here to help us in this will be welcome". He added that he also felt extremely bad when children were killed. He said that the gold prospectors destroy the game and bring illness as well.

**Kirião** says he likes us a lot. He's very happy. "The gold prospectors came and dirtied the rivers, They brought sickness. But these whites don't. They bring medicine. Every-

body gets well. Our children are healthy. We'll plant more food so we can have a big party and everyone will be friends".

**Passarinho** "I'm happy. Now I have many grandchildren. They don't get sick anymore, or if they do they don't die. Now we don't fight so much with other Yanomami. We are all at peace.

**Atabai** "I didn't know whites. There weren't any in the Balawaú. Now I'm satisfied with the medicine which works and cures illness.

**Chefinho** said that in the past they fought a lot, but now they're friends. He complained that at the Yano Post they have to work hard and don't get any food. He also thought we should give more medicine.

**Antonio** "It's that they get high fevers and ask for medicine from the missionaries. They say they'll see about it. Chefinho doesn't like this, he wants the medicine immediately. He complains that the missionaries forbid the use of yakoana. He says that in the beginning he believed Davi when he said that the meeting was an excuse for Toto to play the big shot and that they should fight, but now he sees that was a lie, and he believes in Carlo's good intentions."

**Paulino** says that many have died in his lodge in the past and that he needs the white man and his medicine. Now they are very few and he would like "more whites to go there and take care of them".

**Wabunao** feels safer now with medical assistance and would like to receive more medicine.

**Bruce** He thinks the whites are few and he needs our medical help.

**Cantuário** is happy with the help of the Americans, who are relatives, and, in spite of not knowing us very well, wants us for friends.

**Ararão** says they are satisfied with the medicine and with the people attending to their health needs in Makos' lodge. He asks for the gold prospectors not to kill any more of his relatives with guns and sickness.

**Karera** "We are very courageous. If gold prospectors appear, we'll fight them. The land is ours. Omame (the Creator) gave this land to us. My grandchildren are learning to write and when they show their scratchings to the white man he says: "look how brave and clever they are". Are there no mountains in this place? You are scared that the sky will fall on your heads? You fear the great jaguar that will come and kill you. We must fight. If the gold prospectors come and ask if you want clothes, tell them no.

Deise Alves Francisco

## SYNOPSIS OF THE II NATIONAL CONFERENCE ON INDIGENOUS PEOPLES' HEALTH

The II National Conference on Indigenous Peoples' Health took place from October 25 to 27, 1993 in Luziânia, Goiás, as an integral part of the 9th. National Congress on Health, organized by the Government Health Ministry. 200 indigenous and non-indigenous delegates took part in the Conference, split according to criteria establishing that the users of the health program (the Indians) should constitute 50% of the representation. Delegates were elected in state and regional conferences, the number being proportional to the number of indigenous people in each region.

The principal objective was to define a National Health Policy for Indigenous Peoples, updating the recommendations of the 1st. Conference in line with the consolidation of the new SUS (Integrated Health System), incorporating a sub-system adapted to the health needs of indigenous peoples into it.

The right of indigenous peoples to preserve their land and natural resources and their right to health as part of the rights of citizenship were recognized as basic principles of this policy. It was declared that health action and services should be carried out by an integrated system, decentralized but universal, with equal participation from the communities served and guaranteeing that indigenous peoples would be served according to their specific social, cultural and health needs. The universal character of the system could only be made viable by adaptation to the differing needs of different peoples.

Despite this decentralization, the Federal Government's inherent responsibility towards indigenous health was reaffirmed, without excluding complementary contributions from municipal and state authorities or from other government institutions and non-governmental organizations to the cost of execution and upkeep.

The Health Assistance Model chosen for indigenous health should be based on DSEI, or Special Indigenous Health Districts, established according to projects prepared in conjunction with the communities, supervised by the NISI (Inter-Institutional Indigenous Health Nuclei), which will define the responsibilities of each entity involved. The DSEI should be characterized by territories that reflect ethnic, geographical and epidemiological boundaries, by social control through Indigenous District Councils, by a service network of adequately trained and equipped health teams and by administrative and financial autonomy.

Also debated were the training, selection and career opportunities of professional health workers in public institutions, as well as the role of teaching and research institutes.

The II CNSI also recognized the importance of not only respecting but also finding ways of guaranteeing the preservation of traditional (indigenous) systems of health care.



A report follows on the recent massacre of Yanomami indians carried out in Venezuela by Brazilian *garimpeiros*.

We had known the Hwaximeutheri since 1991 under the name Bokarahutumethere, a group with whom we had had contact several times when they visited Toototobi.

Roughly two months before the news of a massacre officially broke, we had received the information from visitors to the post at Balawau that a number of Yanomami had been killed by prospectors. We had passed the information on to Funai.

On August 24th 1993, two Hwayasiketheri hunters arrived at the Balawau post saying that, while out hunting, they had come across survivors from the massacre, some of them with shotgun wounds, on their way to the Makos village in Toototobi.

Our doctor gave this information to the CCPY office in Boa Vista the same day at 18:00 hours, and the next day we sent a plane to take him to Toototobi.

By this time, there was already a considerable amount of imprecise information in the press about how many yanomami had been killed and where the massacre took place.

That same day (25/08) our team, which consisted of a doctor, a medical assistant and a microscopist, started out for the Makos village (four and a half hours' walk from the post). Halfway there they came across the survivors, who were wounded and making their way to the post for treatment. The doctor returned to the post with the survivors, while the remainder of our team went on to the Makos village in order to find out what had happened to the others.

On August 26th we sent another plane to Toototobi with the anthropologist Bruce Albert and the Yanomami Levi from Demini, sending the doctor back to Boa Vista to give evidence to the Federal Police.

What follows is Bruce Albert's detailed report on what happened.



# THE MASSACRE OF THE YANOMAMI OF HASHIMU<sup>1</sup> Bruce Albert<sup>2</sup>

Brasília, Brazil

On August 19, 1993, Brazilian and international news agencies reported the massacre of Yanomami Indians in the Amazon jungle. Initial government figures indicated that 19 Indians had been killed by gold miners. A week later this number was raised to 73. When it was then ascertained that, in fact, the total of victims was 16, the topic disappeared from the news and interest in the event waned. For those who thought 16 deaths reduced the seriousness of the case; and for those who feared that "only" 16 deaths would dissolve the attention paid to it, I offer this chronicle as food for thought.

## The gold miner's trap

The origin of the Hashimu massacre springs from a situation of chronic interethnic conflict created by the presence of predatory gold mining in the Yanomami area<sup>3</sup>. Since the beginning of the great gold rush in Roraima<sup>4</sup> in August 1987, various Indians have been assassinated and other murders are likely to occur for the same reasons. A brief account of the social and economic context which has led to such violence will provide clues to this tragic case.

When gold miners first enter the Yanomami area, they arrive in small groups. Since they are few in number, they feel endangered by the more numerous Indians and try to buy their goodwill through the liberal distribution of food and goods. For their part, the Indians have little or no experience with Whites and consider this attitude to be a demonstration of generosity that they would expect from any group that wishes to establish bonds of neighborly alliance. At this early stage of cultural misunderstanding, the Indians do not yet feel the health and ecological impact of the mining activities. From their point of view, the work of the prospectors seems enigmatic and irrelevant. In a tone of irony and condescension, they call the prospectors "earth eaters" and compare them to peccaries snorting in the mud.

As the number of gold miners increases, it is no longer necessary to maintain the initial generosity. The Indians turn from being a threat to being an annoyance with their incessant demands for the goods that they are accustomed to receiving. The gold miners get irritated and try to shoo them away with false promises of future presents and with impatient or aggressive behavior.

At this stage of the contact, the Indians begin to feel the rapid deterioration of their health and means of subsistence caused by gold mining. The rivers are polluted, hunting game is scared away by the noisy machinery, and many Indians die in constant

1. The information presented here is part of the official report of the Federal Police. Some of the details come from a preliminary report which the author presented to FUNAI, the Brazilian National Indian Foundation, and to the Attorney General's Office on August 26, 1993.

2. Bruce Albert is a French anthropologist from ORSTOM (Paris) associated with the University of Brasília. He has worked with the Yanomami for the past 18 years and speaks the Yanomami language fluently. He participated in the investigations carried out by the Federal Police and the Attorney General's Office on the Hashimu case as official interpreter and anthropological adviser.

3. The Yanomami Indians number about 22,000 people and their territory straddles the frontier between Venezuela and Brazil. They are the largest indigenous group in Amazonia to still preserve much of their traditions despite the increasing encroachments by national societies as of the 1970s.

4. Roraima is the northernmost state of Brazil, located on the border with Venezuela and Guyana.



epidemics of malaria, flu, etc., all of which tends to destroy the economic and social fabric of their communities. Due to this situation, the Indians come to see the food and goods given by the miners as a vital and indisputable compensation for the destruction they have caused. When this is refused, a feeling of explicit hostility wells up within them.

Thus they arrive at a deadlock: the Indians become dependent upon the prospectors just when the latter no longer need to buy the former's goodwill. This contradiction is at the root of all the conflicts between Yanomami and gold miners. From there, the possibility of minor incidents degenerating into open violence increases. And since the disparity in force between the prospectors and the Indians is enormous, the scales always tip against the Yanomami.

This type of situation clearly shows the extent to which the logic of gold mining repels the participation of the Indians and even their mere presence. Because they use mechanized techniques to extract gold, the miners have no interest in the Indians as labor force or anything else. From the miners' point of view, they are, at best, a nuisance, and at worst, a threat to their safety. If gifts and promises do not get rid of them, then the solution is to intimidate or even exterminate them.

### **Murders at the Orinoco River**

At mid-year of 1993, the relations between the Brazilian gold miners of the "Taboca River" (a tributary of the upper Orinoco in Venezuela)<sup>5</sup> and the Yanomami of Hashimu<sup>6</sup> had come to such an impasse. The visits by the Indians to the mining encampments in search of food and other items were getting more and more frequent. On one occasion, two owners of gold prospecting rafts promised to give hammocks, clothes and ammunition to a young leader of the community. This promise, like many others, was not kept and, one day, this Indian leader went to the storehouse of one of the owners to demand what he had been promised. He had a heated argument with a local employee and ended up scaring him away with shotgun fire. With the storehouse now deserted, the Indian and his companions cut the cords of the hammocks, threw tarps and blankets into the bush, and took a radio and some pots. After this incident, the miners decided to kill the Indians if they returned to bother them. In a previous clash, the miners had taken back a shotgun that they had given to the Indians, in order to guarantee their own safety.

On June 15, the situation came to a head and led to a quick succession of tragic events. A group of six Hashimu youths arrives at a different storehouse in the area to ask for

5. Gold mining has been carried out in this specific region since at least 1991, and is served by two illegal airstrips (Saddam Hussein on the Venezuelan side and Raimundo Nenê on the Brazilian side), located between the upper Catrimani and the upper Orinoco rivers.

6. Prior to the massacre, the community of Hashimu had a population of 85 people living in two communal houses at the headwaters of the Hashimu River, another tributary of the upper Orinoco.



food, trade goods and, perhaps, to take back their shotgun, as was suggested to them by their elders. They are only given a little food and a scrap of paper with a note to be delivered to another storehouse upriver, with the promise that they would be given more things there.

At the next storehouse, they find a group of miners playing dominoes. They are received by the cook who reads the piece of paper, throws it into the fire and harshly sends them away with a few items of food and clothing. The slip of paper read: "Have fun with these suckers". Perked by this message and encouraged by the cook, the miners even think of killing the six youths right there and then, but give up, fearing that other Indians might be hiding nearby. They decide to attack them along the trail that leads back to the Indians' village.

After walking for less than an hour, the Yanomami stop to eat the food they had received. As they eat, six armed miners arrive and invite them to go hunting for tapir and then visit a nearby storehouse. The Indians mistrust the invitation and refuse at first, but finally accept upon the miners' insistence. They all walk single file along the trail, led by a Yanomami and followed alternately by miners and Indians.

Shortly afterward, the last Yanomami leaves the trail to defecate, gives the Indians' only shotgun to another Yanomami, and tells the others to go on ahead. But the miners stand still. Suddenly, one of them grabs the arm of the Indian with the gun and shoots him at point-blank range in the stomach with a sawed off two-barrel shotgun.

Three other Indians are shot at by the other miners. One of the assassins was later to tell a friend that one of the boys knelt down with his hands over his face, trying to escape death, and begged: "Miner, my friend!" He was summarily executed with a shot in the head.

Upon hearing the shots, the Yanomami who was in the bush jumps into the Orinoco River nearby and escapes. The eighteen-year-old who led the file also tries to run away, but is surrounded by three miners who, standing in a triangle, shoot at him as if they were taking target practice. Thanks to his agility and to the thickness of the jungle, he dodges the first two shots, but is wounded by the third. As the miners reload their guns, he gets away and also throws himself into the Orinoco. Still stunned by his wounds, he tries to hide by submerging himself up to his nose. From this position, he sees the miners bury the three victims (the body of the fourth was never found; mortally wounded, he probably fell into the river and was swept away by the current). While searching for the bodies, one of the miners turns and walks toward the river where he sees the hidden boy; he goes back to get his gun, but the youth manages to escape.

Meanwhile, the other survivor arrives at the Hashimu community with news of the murders. Two days later, he returns with a group of men and women to the locale where their relatives had been shot. Along the way they run into the injured boy who tells them what he saw, including the spot where the bodies had been buried (this custom is considered by the Yanomami to profane the dead). They dig up the three corpses, look in vain for the fourth, and take the remains to be cremated at a place an

hour-and-a-half walk into the forest. They collect the charred bones needed to officiate their funeral rites and return home.

During the following days, they organize a ritual hunt which precedes the ceremony of preparation of the mortuary ashes (the bones are crushed and stored in gourds sealed with beeswax). After the hunt (which lasts from a week to ten days), three allied villages are invited to come: Homoshi, Makayu, and Toumahi. Upon finishing the preparation of the ashes, a group of warriors get together to go on the traditional raid of vengeance against the murderers. It should be emphasized that Yanomami tradition demands that violent deaths be avenged in raids where the targets are men, preferably those who committed the previous murders. Women and children are never killed.

On July 26, after a two-day walk, the war party camps on the outskirts of the mining encampment. At ten o'clock the following morning, under a steady rain, they come close to the kitchen of a storehouse where two miners are chatting around the fire. One of the Yanomami slips away and from behind a tree fires his gun at the men. One of the miners is struck in the head and is killed instantly; the other escapes, but is wounded in the side and buttocks. The warriors continue their revenge by splitting open the skull of the dead man with an axe, shooting arrows into his body and, before fleeing, grabbing everything in the storehouse, including shells and the dead miner's shotgun.

### **Preparing for the attack**

The Indian attack infuriates the miners. They bury the body in the kitchen, abandon the storehouse, and carry the wounded man to an air-strip two-days' walk away. Then they begin to plan their retaliation. Two meetings are held where they decide once and for all to put an end to the problems with the Indians, by killing all of the inhabitants of the two Hashimu communal houses, a total of 85 people. They recruit men from all around and gather arms and ten boxes of shells. The entire operation is sponsored, if not commissioned, by the four main owners of prospecting rafts in the region. These four men, some of whom are well-known figures in the State of Roraima, are: João Neto, rural landowner; his brother-in-law Chico Ceará; Eliezio, also the owner of a supply store, and Pedro Prancheta, the author of the note. They had freed their workers, supplied them with ammunition and guns, and hosted their preparatory meetings for the attack. Fifteen heavily armed miners (with 12 and 20-gauge shotguns, 38 caliber revolvers, machetes and knives) set out on the trail to carry out their plan. Among them are several of the men who had participated in the murder of the Hashimu youths, along with four gunslingers contracted to guarantee the safety of the owners.

Meanwhile, the inhabitants of Hashimu leave their houses and camp for five days in the jungle at a safe distance from the community to guard against any counterattack by the miners. Since they are expecting an invitation from the community of Makayu for a celebration, they head in the direction of this village. On the way there they spend the night in their own houses. The next morning, they continue their trip and stop at an old garden between Hashimu and Makayu. As they wait there for a formal invitation

brought by messengers from their hosts, as is the custom, three young warriors go back to the miners' encampment to attack them once again because they are dissatisfied with their previous attempt at revenge. The leader of this party, the brother of the missing dead youth, had particular reason to avenge his brother's death precisely because his body was never found, thus precluding a proper funeral. They arrive at the edge of a gold digging and, protected by the noise of the machinery, slip up and shoot at one of the miners working there. The man, who senses the Indians' presence at the instant of the shooting, protects his head, and is wounded in the arm that served as his shield. The three youths escape and join their Hashimu relatives at the old garden where they are camped.

This attack occurs while the fifteen miners are in route to the Hashimu community, a two-day walk from their encampment. The Indian youths and the miners only miss each other on the trail because on war expeditions the Yanomami avoid trails and hike through the dense brush. Upon arriving at Hashimu, the miners find the houses empty. They look around, find the trail that leads to the old garden, and set out in search of the Indians.

On the previous day at the old garden, the Hashimu people had received the formal invitation from Makayu messengers. Since they are at war with the miners, they decide to shorten that visit to a minimum. Only men and a few women without children will accompany the messengers to the community, leaving at the garden the women with children, along with three older men. These people are left behind for two reasons: they do not walk as fast as the others, and women and children are never attacked in war raids. The three young warriors who had attacked the miners also stay behind to rest.

### **The massacre**

In the morning of the following day, most women in the camp go out to collect wild fruit far away from the old garden. They take along nearly all the children; the old leader of one of the communal houses also accompanies them. Nineteen people stay at the camp, including the three warriors who are still resting.

A few hours later, around mid-day, the miners arrive at the camp and close it off on one side. Children play, women chop firewood, and the others rest in their hammocks. One miner fires a shot and the others begin the shooting, as they advance towards their victims. In the middle of the hail of fire, the three warriors, an older man and a middle-aged woman, two six or seven-year-old children, and a girl of about ten years of age, manage to escape thanks to the complex distribution of the shelters and the thickness of the underbrush typical of old gardens. The two small children and one of the warriors are wounded by buckshot in their face, neck, arms, and sides; the older girl receives a serious wound in the head from which she later dies. From their hiding place, the Indians who escaped continue to hear cries muffled by the sound of gunshots. After a few very long minutes, the miners stop shooting and enter the shelters in order to finish off anyone still living. Machete blows kill not only the injured but also the few who had not been hit; they mutilate and dismember the bodies that are already riddled with buckshot and bullets.



In all, twelve people were killed: an old man and two elderly women; a young woman who was a visitor from the community of Homoshi; three adolescent girls; two baby girls, one and three years old; and three boys between six and eight years of age. Three of these children were orphans of parents who had died of malaria. The woman from Homoshi, of around eighteen years of age, was first shot fire from a distance of less than ten meters and then again from a distance of two meters. A blind, elderly woman was kicked to death while a baby lying in a hammock was wrapped in a cloth and pierced through with a knife.

The miners realize they have not exterminated all of the people of Hashimu. Thus, as a preventive measure, they take away the two shotguns that were in the shelters, shoot off a flare to dissuade anyone from following them, and return to the empty communal houses where they spend the night. The next day they pile up the Indians' household gear left behind and fire volleys of gunshot into them. Then they set fire to both houses and quickly head back to their mining sites. Several weeks later, they hear on National Radio the news of the massacre. They hike for two or three days to the landing strip of Raimundo Nenê. They threaten to kill anyone who informs on them, indicating that any miners who talk "will receive the same treatment that the Indians did". They fly to Boa Vista, the capital of Roraima, and from there most of them scatter all over the country.

### **The cremations**

When the shooting finally stops, one of the three warriors who escaped unhurt runs to where the women were gathering, tells them what happened, sends them into hiding, returns to the camp, and looks for his shotgun which is no longer there. He then calls back the women and sends three of them to Makayu to warn the others. They rush along the trail for several hours. They arrive wailing and in the midst of great commotion, tell of the tragedy and describe in dramatic detail how the women and children had been mutilated and dismembered.

The men of Hashimu go immediately to the camp at the old garden in a forced march and arrive at nightfall. They gather the injured and the other survivors together amidst crying and terror interspersed with angry speeches of bereavement by the leaders. Due to darkness they have to postpone the proper treatment of the bodies. The strong smell of blood forces them to sleep a short distance from the scene of the massacre. At a half-hour's walk, they clear an opening and erect improvised shelters. At day-break, they begin the cremation of the corpses as required by their funeral rites. Not even the high risk of being attacked again by the miners keeps them away from the imperative task of providing a proper funeral for their relatives.

As they begin to gather the mutilated bodies, the girl whose skull had been cut open suddenly appears from the brush screaming in pain and terror as her mother runs toward her crying in desperation.



Cremation begins with each body placed in fetal position in individual pyres. The adults are cremated immediately at the camp; the corpses of the young are taken to the clearing where the group had spent the night, and are cremated there. As soon as the fire consumes the bodies, the survivors remove their scalding-hot charred bones and place them in baskets and even in cooking pots. Some teeth and many bone fragments remain in the ashes, some of which showed vestiges of the shooting.

The hurry in cremating the bodies is due to the fear that the miners will return to kill the Indian men. It is inconceivable to them that the murder of women and children could be considered by the Whites as appropriate revenge. The urgency in fleeing is so great that the dismembered body of the Homoshi visitor is left without cremation as she has no relative present to do it. A gourd containing the ashes of one of the youths murdered in the first attack had been split open by the miners and the ashes scattered on the ground. The mother of the youth tries to gather them in leaf bundles, but in her haste she leaves behind a few of the bundles. The ashes of the dead are the Yanomami's most precious possessions; they are under the constant care of the women, who carry them even when they travel.

## The flight

Upon completing the cremations, the people of Hashimu collect all the belongings of the deceased which will later be destroyed during the funeral rites. They begin their flight, which takes several weeks, through the dense forest in a wide detour designed to dodge the miners, walking often at night, with hardly anything to eat, while carrying the three wounded girls. After eight days of walking, they stop at a friendly village, Tomokoshiui. That night, the girl with the open wound in her head, dies. Her parents carry her body through the jungle for one more day before cremating it at the locale where they camp for the night.

Without delay, the fleeing Indians cross the trails leading to two other villages, Ayaobe and Warakeu. They stop at a fourth, Maamabi. They had crossed the Orinoco River and, heading south, approach the border of Brazil near the upper Toototobi River, in the State of Amazonas. They finally arrive at Marcos' village along the upper Pashotou River, a tributary of the Toototobi. It was August 24, 1993, nearly a month after the massacre.

The survivors of Hashimu chose the upper Toototobi region for several reasons: it is an area without gold miners; its inhabitants are friends with whom they had frequent contact; and it also has a health clinic to which they had gone for treatment of malaria epidemics on various occasions in the previous three years.

## The funeral rites

When they stopped at the two friendly villages on the Venezuelan side of the border and afterwards, at Marcos', the Hashimu Indians began to grind the charred bones of





their dead relatives, keeping them in sealed gourds carried in open baskets or wrapped in cloth.

In the great inter-community funeral ceremonies that will be organized in honor of the dead, the ashes of the adults will be buried in the hearths of their relatives, and the ashes of the children will be drunk mixed with plantain soup. On this occasion, the gourds, baskets, and deceased's possessions will be burned or destroyed.

The belongings of the dead have to be disposed of, their personal names obliterated, and their ashes either buried or ingested during the Yanomami funeral rites. This procedure guarantees that their specter travels to and remains in the world of the dead on the "back of the sky", thus barring their return to torment the living. For this to happen, it is necessary that the deceased's relatives repeatedly commemorate them until all the ashes are used up during successive mortuary ceremonies.

This is the reason why the people of Hashimu had to recover the remains of their dead, even under the imminent threat of another attack by the gold miners. To not do so would condemn the specters to wander between two worlds, haunting the living with an interminable melancholy even worse than death.

The 69 survivors of Hashimu, refugees at Marcos' village, are now trying to rebuild their lives, with plans to make new gardens and new homes. In the coming months, and the better part of next year, they will also be busy organizing the funerals of their relatives killed in the massacre, and of several others who have recently died of malaria spread by the gold miners. Their mourning will last until the ashes are gone, and only then will their lives return to normal. Even then, they will never forget that the Whites are capable of cutting up women and children, just like "people-eating spirits". The warriors of Hashimu say that they have given up taking revenge on the miners. They would do so if they considered these Whites to be human beings with a sense of honor. Now they doubt it. The miners are not even fit to be enemies. It is their hope that the murderers will be "locked up" by other Whites so that they will never return to Indian lands.

October 8, 1993

Translated from Portuguese by Paul E. Little





**Description of body lesions caused by projectiles from a firearm (rifle), found on 4 Yanomami from Hwaximeutheri examined on August 26, 1993.**

**1. female child, aged approximately 7 years:**

- a lesion that perforated the face, healed. Lead was eliminated via the oral cavity.
- two entry wounds in the forearm and lower arm and two exit wounds, all in a healing process. Inflammation around the wounds.

**2. female child, aged approximately 6 years:**

- a perforated wound in the wrist with exit wound, healing but with secondary infection.

**3. Simão, male, aged around 20:**

- a perforating wound in the lower cervical region. An incision in the lower cervical region caused by a knife, in order to take out the lead, performed by the Yanomami. Both wounds in healing process, with a small secretion of pus.
- a perforating wound on the upper third of the right thorax, healing. Incision caused by knife in the vertebral region to take out lead. Secondary localized infection.
- three healed perforated wounds on the right articulation of the jaw.

Spontaneous elimination of lead fragment via the oral cavity with functional incapacity of the jaw due to pain.

**4. Reia, male aged approximately 18**

- seven perforating wounds, one in the right shoulder, three in the right side of thorax and three in the lower forearm with two exit wounds. All wounds are healed.

Boa Vista, August 27, 1993

**Claudio E. Oliveira**

CRM 5251395-6

CCPY-BV-RR

## NUMBER OF DAYS WORKED BY EACH HEALTH PROFESSIONAL IN THE FIELD

Health Professional	Job	1992	1993												Total Days
			J	F	M	A	M	J	J	A	S	O	N		
Deise A. Francisco	Doctor	115	B	T	B	•	•	B	T	T	•	T	B	170	
Claudio E. Oliveira	Doctor	•	•	T	B	T	B	B	B	T	B	T	B	127	
Solange P. Campos	Nurse	•	•	•	•	•	•	•	•	T	•	•	T	95	
M.Conceição S. Souza	Nurse	•	•	•	•	•	•	•	•	•	B	B	•	68	
M.Dulcimar F. Castillo	Nurse	14	T	B	•	•	•	•	B	•	•	•	•	113	
Antonio C. Balbino	FNS Nurse	•	•	•	•	B	B	•	•	•	•	•	•	44	
M.Conceição Paixão	Assist. Nurse	52	B	B	B	T	•	•	T	T	•	•	•	196	
Jorge André Gurjão	Assist. Nurse	45	T	T	T	•	•	T	T	•	T	T	•	245	
M.Clecília Silva	Assist. Nurse	45	D	•	•	•	•	•	•	•	•	•	•	60	
Teoneide B.de Melo	Assist. Nurse	84	D	D	D	D	•	•	D	•	•	•	•	228	
João das Neves Filho	Assist. Nurse	•	B	B	B	B	•	•	B	B	•	•	D	223	
Francileuza Bandeira	Assist. Nurse	•	•	•	•	T	T	•	•	•	•	B	B	93	
Elizonete S.Lopes	Assist. Nurse	•	•	•	•	T	T	•	•	•	•	•	B	90	
Nadir R.da Silva	Assist. Nurse	•	•	•	•	D	•	•	•	•	•	•	•	42	
José Almir C.Alves	Assist. Nurse	•	•	•	•	•	•	•	•	D	D	•	T	93	
Ita Saldanha Saraiva	Assist. Nurse	•	•	•	•	•	•	•	•	•	B	D	•	68	
Marcos T.do Carmo	Microsc. Oper.	153	•	T	T	T	B	•	•	B	B	•	B	340	
Gerson A.Ficali	FNS Mic. Oper.	•	•	•	T	•	•	•	•	•	•	•	•	32	
Manuel Cruz de Souza	Microsc. Oper.	•	•	•	•	T	T	•	T	T	•	T	T	136	
Dionizio Miranda	General Serv.	•	•	•	B	B	B	B	•	B	B	B	B	202	

\* T = Toototobi    B = Balawau    D = Demini

\* Total number of days worked in the field corresponds to 1993 figures added to 1992.

Note: The doctor's presence in the Demini occurred on 6 occasions to attend to cases needing a medical evaluation.

## REPORT OF A VISIT TO THE DEMINE REGION

### Dental Consultations

**Period: August 5 to 19, 1993**

I arrived in the Demine region at the beginning of August and stayed 14 days to perform dental consultations.

In charge of health was the assistant nurse José Almir Carneiro. Also present in the Demine were Bruce Albert, Gale Gomez and William Milliken.

Davi now lives with all the family in the new house of the Watoriktheri, half an hour from the post.

After setting up the consulting room inside the post, I began attending to patients according to program priorities.

Consultations occurred normally during my stay in the Demine.

A few days after my arrival, the Yanomami of the NTB Mission (Nova Demine) arrived in the Demine. They were 15 in all. Levi had brought the outboard motor given him by Davi for the latter to repair, since the missionary had refused to do so. This was carried out quickly, taking advantage of the aircraft which had come to the Demine.

On this trip I carried out root canal treatment on the front teeth in the Demine (Fátima) and in the Catrimani (Kori). Since this is specialized work requiring special care using difficult techniques to perform in the field, extra special care was taken to guarantee a successful result.

The result was good, and it is a valid alternative in certain cases.

I taught the nursing assistant to apply fluoride to the children. Toothbrushes were left, individually identified, for the monthly local application of fluoride.

### Caries occurrence

3 years after the last survey carried out by CCPY, I carried out a fresh survey to verify the occurrence of caries over this period.

In the 1990 survey, the average CLF (Caried, Lost and Filled) was 4.7 (see report of Jan. 1990). In this latest survey, the average CLF was 1.9.

Total number examined = 69, with average CLF = 1.9.

Such a low incidence of caries (principally in the children), brings much satisfaction, demonstrating that prevention works.



We should continue to follow the targets set by the project, training assistants in prevention using fluoride and cariostatic material, with curative treatment to be carried out by the dentist.

### **Treatment carried out**

Total consultations = 47

Adult tooth extraction = 14

Milk tooth extraction = 9

Fillings with amalgam = 29

Fillings with resin = 21

IRM fillings = 6

Root canal treatment = 2

ATF = 37

Boa Vista, September 21, 1993

**Maria Aparecida de Oliveira**

Dentist



## LOCATION OF COMMUNITIES

AREA 15 - January, 1994

Sub-regions: Balawau / Tarau, Toototobi, Nova Demini, Posto Ajuricaba and Aracá Mission



### PERMANENT HEALTH CARE FROM CCPY

#### GROUP A Sub-region Balawau / Tarau

1. Communal house of Roberto
2. Xakibitheri
3. Koherebitheri
4. Balawauitheri
5. Xotokomabitheri
6. Hwayasikbitheri (2 casos)
7. Raharabitheri
8. Posto Yano
9. Uxiximabitheri

#### GROUP B Sub-region Toototobi

10. Posto Toototobi
11. Communal house of Fialho
12. Communal house of Totó
13. Communal house of Paulino
14. Communal house of Makos
15. Communal house Hwaximeu (New location of survivors of Haximu massacre)
16. Eduardo

#### GROUP C Sub-region Demini

17. Communal house Wateriké

### OCCASIONAL HEALTH CARE

18. Weyukutheri (2 casos)
19. Maxababitheri
20. Xihometheri
21. Maloca do Cantoário
22. Maloca do Antonio
23. Iton (Ajuricaba)
24. Kebrobe (Aracá)

● Approximate location of Indian villages (CCPY Health team field survey, 1993)

▲ Communities plotted from geographical coordinates obtained from GPS in a Meta/FAB overflight

■ Airstrip

5 0 10 20 km

# ARCHITECTURAL PROJECT CCPY-BALAWAÚ A HEALTH POST FOR THE YANOMAMI

**Architect: Leda Lima Leonel**

## **1. THE SITE**

The site was chosen previously by the Yanomami together with CCPY, in an area of virgin forest. Access is by air or by long treks through the forest.

## **2. STAGES OF THE PROJECT**

### **a) Preliminary studies**

A preliminary study was conducted based on an initial program and survey of the area necessary for the various activities to be carried out on the site. This was a brief viability study and a preliminary cost estimate.

### **b) Visit to the Toototobi Post**

(between December 3 and 13, 1992)

After analysis and study of the preliminary study, a visit to the site was necessary.

This visit's objective was to carry out a technical analysis of the natural conditions, study traditional Yanomami constructions, observe a functioning health post, research available materials and observe the relationship between the Yanomami and CCPY staff. The final aim was to make the project compatible with the human and environmental characteristics of the new post.

The visit allowed the preparation of a more detailed and adequate program, according to which an ante-project was developed. After renewed analysis and discussion, a detailed project was drawn up ready for execution.

### **c) The Final Project**

**The Architectural Starting Point: the Shabono as a model.**

Two basic ideas were responsible for the adoption of the Shabono (a traditional Yanomami structure) as a model: the intention of giving value to, preserving and respecting the traditional form and space of the people, so that they would feel at ease and welcome, and the utilization of their ancient knowledge of the region, which has resulted in a simple and efficient architecture in aesthetic, constructive and principally environmental terms.



The basic form of the Shabono proved perfectly adequate for the program for which the post would be used. The adverse construction conditions, such as the difficulty of access, of finding specialized labor and the need to reduce costs and the time limit, led to the simplification of the original elliptical form. The original essential building characteristics of traditional construction were maintained, such as the structural system, the general proportions and the layout of communal, private and corridor areas, etc. The modular system of construction was also maintained.

#### **d) Important considerations:**

Once the program and the departure point had been decided, other variables involved in the project were carefully studied by CCPY and by the architect, among which:

- compatibility of having different activities in the same building,
- adequate lodging facilities for Indians and permanent and visiting staff,
- satisfactory hygienic, physical and environmental conditions, especially in the medical wing,
- location and protection of equipment,
- special finished materials for areas needing to be totally disinfected.

A familiar, less aggressive and more welcoming atmosphere was desired for the Indians.

Separation of patients from their families causes anguish to both. We therefore planned for families to be able to maintain constant contact with a sick relative. There is also a space reserved for the work of a shaman.

Technicians, staff and visitors have their own private space, within a communal construction. Thought has been taken to ensure the best possible working conditions. The fact of a small group of people sharing the same living quarters for three or four months can be potentially difficult in terms of maintaining privacy. This has been a recurring problem in all the posts visited, where the lack of adequate wall partitioning and ceilings and, in some cases the sharing of sleeping space, has meant lack of privacy in the slightest movement. Special care has been taken in the partitioning of the project's space.

#### **e) Materials used:**

Due to the aforementioned difficulty of access, qualified labor, transport etc., the ideal would have been to have used only locally available materials. This was not totally possible.

The shabonos are abandoned every so often and reconstructed on other sites. Because of this, the Yanomami use materials which deteriorate relatively quickly, such as very light wood, straw, matting etc. The shabono also has no internal partitions.



The health post, in contrast, needs to be permanent, with the minimum maintenance necessary and needs to be partitioned internally. Machinery and equipment need to be protected.

The high rate of decomposition of Amazonian materials meant they had to be chosen with care. For the structure, partitions and floors, local cedar was chosen, due to its lack of susceptibility to attack from woodworm and other pests. The wood is taken from the surrounding area, carried manually and machined on site. As a substitute for part of the wood, the on site manufacture of bricks and roof tiles was suggested, reducing the amount of carpentry necessary. Local earth, however, proved inadequate for this and for use in wattle and daub construction. Straw or wood chips were discarded for use in roofing material, due to their fragility and the ease of insect and pest infestation. They allow water to infiltrate, and yet don't keep out dust and particles and need much maintenance. For this reason it was decided to use a manufactured rubberized roof, with heat and sound insulation. It is also light, easy to manage and install. The constant ventilation allowed by the traditional use of thatch for the roof was maintained by using screening below the roof and above the ceiling. Straw will, however, be used in lighter structures, such as louvered slats and shutters.

#### **f) Power**

Solar power is the logical choice, perhaps the only one possible for the site. It will be used for the working of machinery, equipment, water pumps, lighting etc. CCPY and the architect and GTZ are now studying the installation of the necessary equipment.

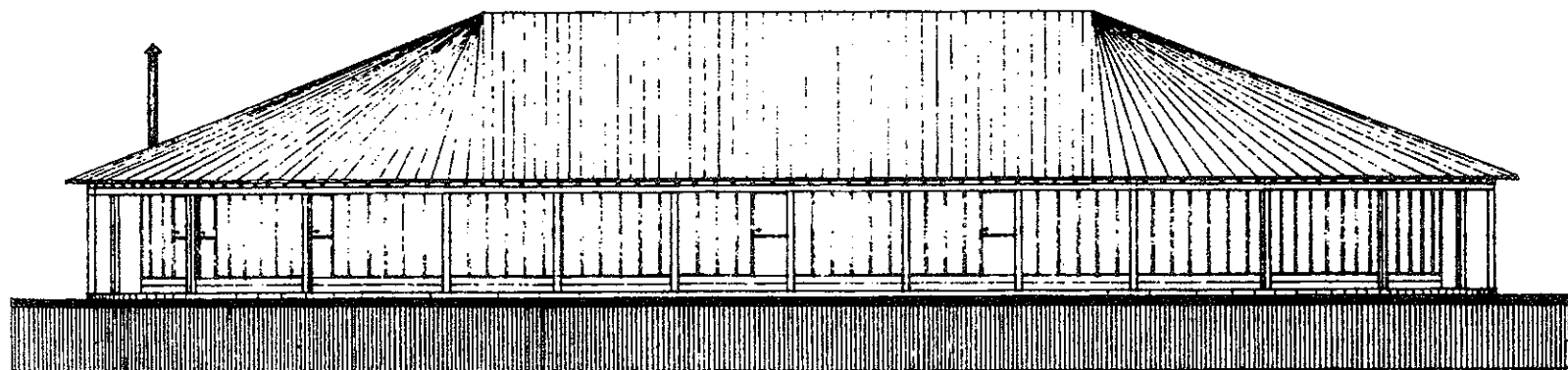
### **3. CONCLUSION**

Concern for environmental and climatic factors, the necessity for durability, practicality, economy and safety were always uppermost in our minds while planning, and now building the project. The physical and psychological well being as well as user comfort were especially considered.

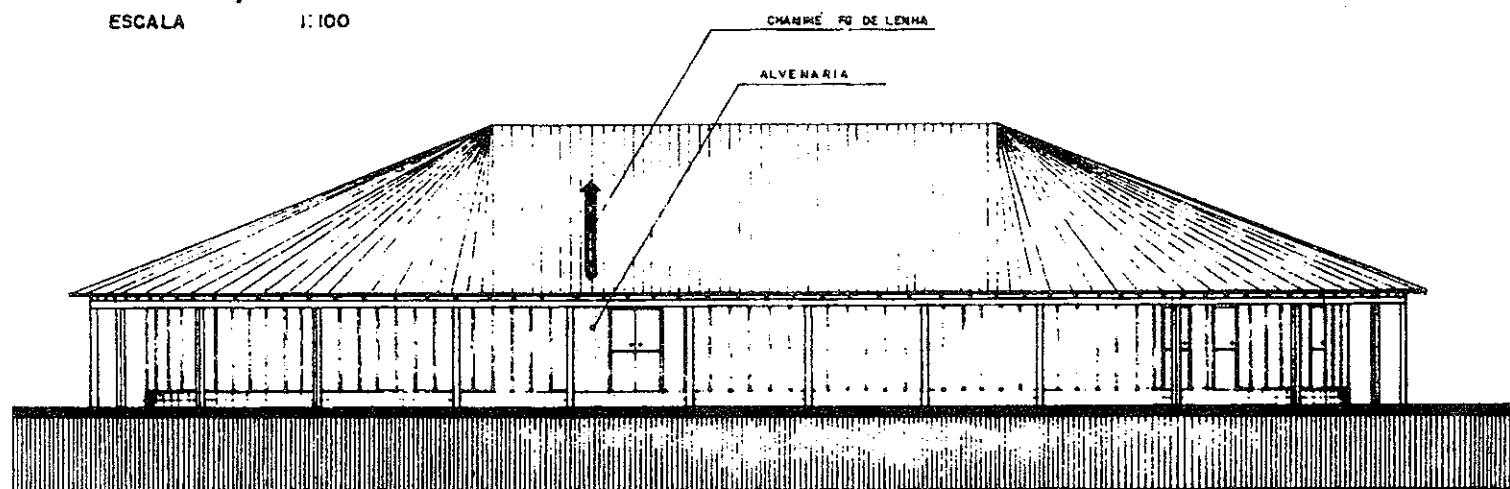
The project always aimed to combine the knowledge of Indians and non-Indians, specialists in different areas, to create a building suited to the special conditions of the Amazon Forest, and counted on the experience of all those who, in one way or another, supported the project.

Belo Horizonte, December 27, 1993

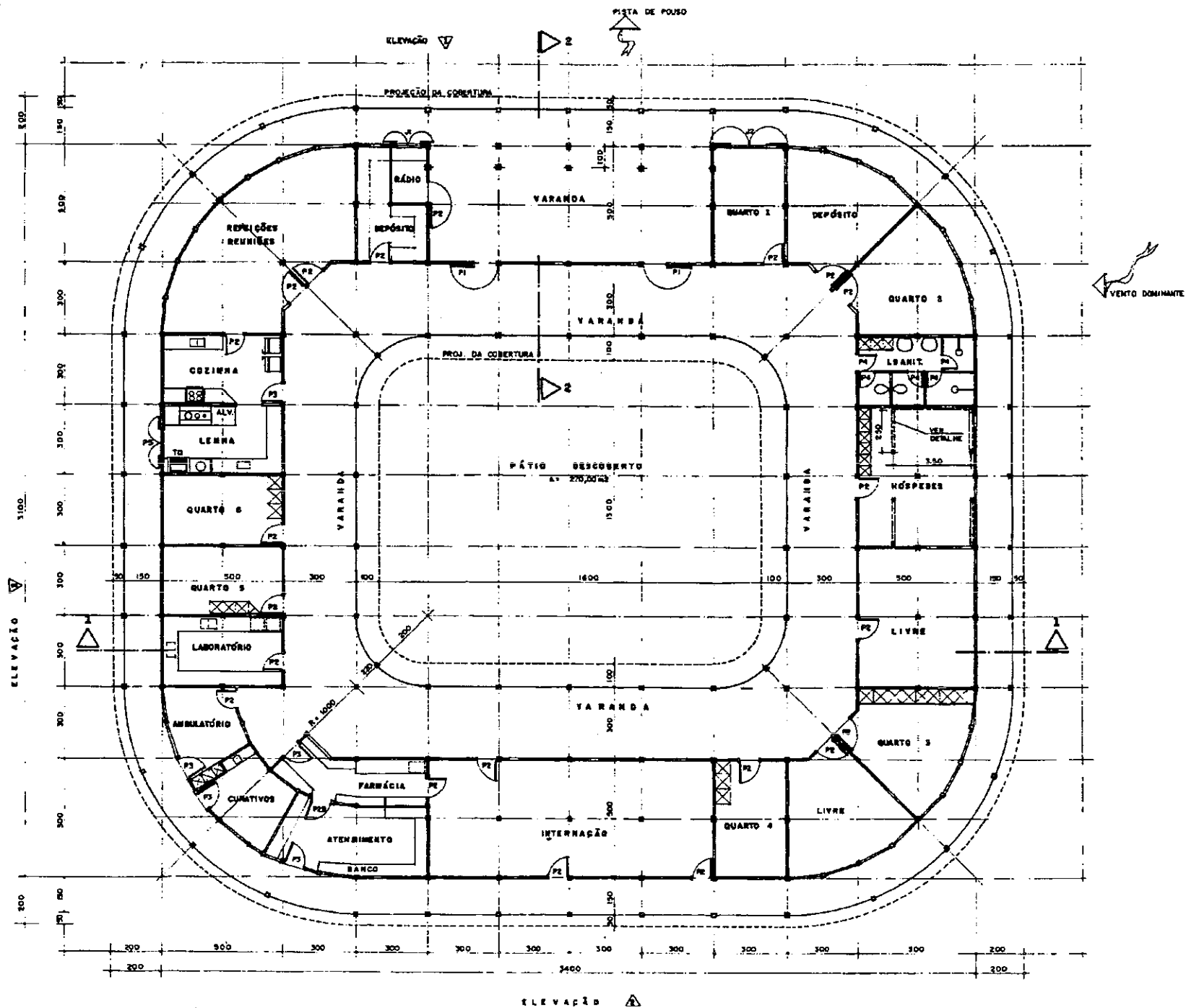




ELEVÇÃO - 2  
ESCALA 1:100



ELEVÇÃO - 3  
ESCALA 1:100



## COMPUTERIZATION PROCESS AT CCPY - BOA VISTA

### OBJECTIVES:

To obtain, through the use of information technology tools, an improved performance and control of activities developed in the area of health care offered to the indigenous population.

### AREA OF ACTIVITY:

The overall computerization project covers various different areas and will be carried out in stages, so that by the end of the process it will be possible to cross reference and integrate similar activities. The basic areas, divided up for the purposes of study and planning the systems project comprise:

#### 1. HEALTH DATA BANK:

This part of the project refers to the setting up of a Computerized Data Bank containing individual and collective health data pertaining to the Yanomami population served by CCPY. The Data Bank project aims principally to establish methodologies for health consultation, collection of information, medical follow ups and the collation of statistics which will orient activities in the field (see later for examples of Data Bank forms).

#### 2. COMPUTERIZED DOCUMENT FILING SYSTEM:

Computerization of filing and access to various types of documents and reports has already been carried out in our São Paulo office, and the same system will now be set up in Boa Vista. The principal objective is to facilitate file organization and provide indexed access to stored documents when references are needed for a particular piece of work.

#### 3. COMPUTERIZATION OF NURSING REPORTS:

Monthly reports are made which go under the title of Nursing Reports. A system is being worked on at the moment to produce a standardized format for these reports so that, once computerized, the information can be cross referenced with the information on individuals stored in the HEALTH DATA BANK, giving a more detailed overview of the results of the health activities carried out by CCPY in the Yanomami territory.

#### 4. INVENTORY AND DISTRIBUTION CONTROL OF MEDICINE:

When set up, this system will allow better control and distribution of medicine and other medical supplies among the CCPY health posts. In this manner, through a more efficient control of inventory, overstocking or lack of supplies can be avoided, accord-

of the process aims, principally, to avoid wastage caused by deterioration through accompanying and redistributing items among the various posts (see later examples of the computerized forms to be used in this area).

## **5. SYSTEMS OF ADMINISTRATION:**

An area for future computerization is that of administration. Through the use of spreadsheet software and other specific software to be developed, we intend to maximize efficiency in the administration of personnel and activities in Boa Vista.

The objective of this synopsis is to set out the various activities involved in the Overall Computerization Project in Boa Vista so as to avoid activity overlap, and so that each particular system is referred to in the correct fashion. The following terminology will therefore be used:

### **OVERALL COMPUTERIZATION SYSTEM IN BOA VISTA:**

- **HEALTH DATA BANK**
- **COMPUTERIZED FILING SYSTEM**
- **COMPUTERIZATION OF NURSING REPORTS**
- **INVENTORY AND DISTRIBUTION CONTROL OF MEDICINE**
- **SYSTEMS OF ADMINISTRATION**

### **COMPUTERIZED DATA BANK**

### **ANTHROPOLOGICAL AND MEDICAL INFORMATION**

#### **Objectives:**

- Setting up of a computerized system for the collection and control of data on the Indians served by the CCPY health project.
- Establishment of a standardized procedural methodology, both for activities in the field and for data collection.
- Production of statistics for following up work and the results of activities related to health and the prevention of disease.



## ACTIVITY SCHEDULE

### Part 1: Data Survey

(Carried out between September and December, 1991)

- Survey of work methodology and tools for information collection (questionnaires and reports) presently in use, as well as the breadth of reach of the project.
- Creation of pilot tools, based on those already in use, including some proposals for integration and rationalization
- Initial size of computerized data bases and determination of the limits of the computerization project.
- Definition of the preliminary project and creation of a pilot system. (Demo 1)

### Part 2: Feasibility and Compatibility Study

(Carried out during 1992 by the various parts involved)

- Utilization of the chosen instruments.
- Verification of instrument suitability to the situation in the field.
- Reappraisal of the instruments and proposals for the alteration/implementation of the same.
- Redefinition of the preliminary project and creation of a new pilot system (Demo 2).

### Part 3. Preliminary Project

(Carried out during 1993)

- Defining of new instruments in view of problems encountered in the previous phases.
- Integration of the various parts involved in the overall project.
- Definition of attributes and responsibilities for the work groups.
- Creation of new tools for information gathering and field procedures in order to set up the data bank
- Experimental use of the tools and proposals for change based on difficulties encountered.
- Final definition of the databases, file layouts and tools for information gathering (forms and questionnaires for use in the field).

## NEXT STAGES (from 1994)

### Part 4: Final Project

- Proposal for alterations to the field tools and procedures with a view to integrating and improving the performance offered by computerization.
- Final definition of information gathering instruments, procedures suitable for computerization and results hoped for from the data bank.
- Allocation of responsibilities to the parts involved, regarding both operational activities and the carrying out of the stages of implantation.

### Part 5: Computer System Project

- Definition and codification of the component parts of the data bank system.
- Creation of a system prototype (Demo 3).
- Presentation of the system to the parts involved.
- Definition of operational requirements (personnel) and the training of operators
- Simulated real time system test.
- Alterations and corrections resulting from events during the simulation.
- Final setting up of the system and rebriefing of the operators.



DADOS DE PROCREAÇÃO (NO CASO DE SEXO FEMININO)

ANO  LOCAL DA PRIMEIRA MENSTRUÇÃO  FONTE

No GESTAÇÕES  No PARTOS  No ABORTOS  No INFANTICÍDIOS

GESTAÇÕES  
MES E ANO DO EXAME

IDADE GESTACIONAL

DESFECHO

DADOS ODONTOLÓGICOS

CARIADOS  EXTRAÍDOS  EXTRAÇÕES INDICADAS

OBTURADOS  ÍNTEGROS  TRATAMENTOS REALIZADOS

TRAT. NECESSÁRIOS  APLICAÇÕES DE FLUOR

DATA

URGÊNCIAS E TIPO DE ATENDIMENTO

DADOS DE VACINAÇÃO

Sabin

D.T.P.

B.C.G.

Sarampo

Hepatite B

Febr. Amarela

Outra

CICATRIZ VACINAL

EXAME FÍSICO

NUMERO-IDENTIFICAÇÃO

DATA DO EXAME

DADOS CADASTRAIS

NOME YANOMAMI

NOME PORTUGUÊS

LOCAL DE NASCIMENTO

NOME E NUMERO DE IDENTIFICAÇÃO DO PAI

NOME E NUMERO DE IDENTIFICAÇÃO DA MÃE

NOME E NUMERO DE IDENTIFICAÇÃO DO TUTOR (Se Houver)

LOCAL DE RESIDÊNCIA

POSTO / MISSÃO

DADOS COLHIDOS

PESO (Kg)  P.A. (mmHg)  ANEMIA (+/-)  ESPLENOMEGALIA

ALTURA (Cm)  F.C. (bpm)  ICTERIC (+/-)

TEMP. (°C)  F.R. (rpm)  DPC (I, II, III)  HEPATOMEGALIA

LINFADENOMEGALIA GENERALIZADA ☐

LINFADENOMEGALIA LOCALIZADA ☐

OUTROS DADOS OBSERVADOS

## DIARRÉIA/DISENTERIA

Número identificador															Data de Lançamento														
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Nome																													
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Maloca																													
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Suspeita <input type="checkbox"/>															Confirmada <input type="checkbox"/>														
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>APRESENTAÇÃO</b></p> <p>Início Sintomas</p> <p>Frequência</p> <p>Líquidas</p> <p>Muco</p> <p>Sangue</p> <p>Vômito</p> </div> <div style="width: 45%;"> <p>Duração</p> <p>Líquido-pastosas</p> <p>Pastosas</p> <p>Pus</p> <p>Febre</p> <p>Cólica</p> </div> </div>																													
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Desidratação															dias														
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<p><b>EXAMES COMPLEMENTARES</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Tipo de Exame</p> <p>Sedimento das Fezes</p> <p>Parasitológico</p> <p>Cultura</p> </div> <div style="width: 45%;"> <p>Data</p> <p>Resultado</p> </div> </div>																													
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Outros																													
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>																													
<p><b>DIAGNÓSTICO</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>																													
<p><b>TRATAMENTO</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Hidratação Oral <input type="checkbox"/></p> </div> <div style="width: 45%;"> <p>Hidratação Venosa <input type="checkbox"/></p> </div> </div>																													
Outros																													
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## MALÁRIA

<b>Número Identificador</b>															<b>Data de Lançamento</b>														
<b>Nome</b>																													
<b>Mafoca</b>																													
<b>Posto</b>																													
<b>Suspeita</b>															<b>Confirmada</b>														
<b>ANAMNESE</b>																													
<b>Data de Início</b>															<b>Result. Lâmina</b>														
<b>Febre</b>															<b>Mialgia</b>														
<b>Calafrio</b>															<b>Cefaléia</b>														
<b>Sudorese</b>															<b>Sint. Digestivos</b>														
<b>Observações</b>																													
<b>EXAME FÍSICO</b>																													
<b>Esplenomegalia</b>															<b>Sinais Neurológ.</b>														
<b>Hepatomegalia</b>															<b>Peso</b>														
<b>Anemia</b>															<b>Kg</b>														
<b>Ictericia</b>															<b>°C</b>														
<b>Observações</b>																													
<b>TRATAMENTO</b>																													
<b>Data de Início</b>															<b>Nº de Dias</b>														
<b>Medicamento</b>																													
<b>Posologia</b>																													
<b>LÂMINAS DE CONTROLE</b>																													
<b>Nº</b>					<b>Data da Coleta</b>										<b>Resultado da Lâmina</b>														
01																													
02																													
03																													
04																													
05																													
<b>EXAMES COMPLEMENTARES/OBSERVAÇÕES</b>																													

## CALAZAR

Numero identificador  Data de Lançamento

Nome

Maloca

Posto

Suspeita ☐ Confirmada ☐

**ANAMNESE**

Início Sintomas  Anorexia/Náusea

Febre  Aum. Vol. Abdominal

Emagrecimento  Diarréia

Astenia  Tosse

Hemorragias

Outros

**EXAME FÍSICO**

Temperatura  ° C Limfadenomeg.

Esplenomegalia  IH  Desnutrição

Hepatomegalia  Cm do RCD  Peso

Anemia  ++++ Edema

Outros

**EXAMES COMPLEMENTARES**

Aspirado de Medula ☐ P ☐ N ☐ NP ☐

Punção Espinal ☐ P ☐ N ☐ NR ☐

Sorologia ☐ P ☐ N ☐ NR ☐

Outros

**DIAGNÓSTICO**

Data  Calazar ☐

Outros

**TRATAMENTO**

Esquema ☐ 1 ☐ 2 Data de Início  Data de Término

Local

**EVOLUÇÃO**

Cura ☐ Abandono ☐ Resistência ☐

**COMPLICAÇÕES/ACOMPANHAMENTO/OBSERVAÇÕES**

## TUBERCULOSE

Numero identificador  Data de Lançamento

Nome

Maloca

Posto

Suspeita ☐ Confirmada ☐

**ANAMNESE**

Início Sintomas  Anorexia

Tosse mais 21 dias  Hemoptise

Expectoração  Tipo  BCG/Cic Vac.

Dor Pleurítica  Contato

Condições de Vida/Outros

**EXAME FÍSICO**

Temperatura  ° C Desnutrição  Q, I, II, III

Esplenomegalia  IH  Peso  Kg

Hepatomegalia  Cm do RCD  Linfadenomeg. General.

Anemia  ++++ Linfadenomeg. Localiz.

Apar. Respirat.

Outros

Remoção ☐ S ☐ N Motivo

**EXAMES COMPLEMENTARES**

Tipo de Exame  Data  Resultado

Escarro 01

Escarro 02

Escarro 03

PPD

RX Tórax

Outros

**DIAGNÓSTICO**

TB Pulmonar ☐ TB Extra-Pulmonar ☐ TB Disseminada ☐

**TRATAMENTO**

Esquema ☐ 1 ☐ 2 ☐ 3 Data Inic  Data Term

Local

**EVOLUÇÃO**

Cura ☐ Abandono ☐ Resistência ☐

Esq. Alternativo

**COMPLICAÇÕES/ACOMPANHAMENTO/OBSERVAÇÕES**



60

Data de Lançamento

1	2	3
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[illegible][illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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There follow some examples of the forms used in the field in the preparation of the monthly nursing reports and in the inventory control of consumable goods(75 items), of permanent material (54 items) and in the distribution of medicine (100 items). These are subsequently sent on to Boa Vista to be fed into the Data Bank and used in material restocking. If more details are required, please contact CCPY.

#### INSTRUCTIONS FOR FILLING IN THE MONTHLY NURSE'S REPORT

##### 1. IDENTIFICATION

- 1.1. Identify place, time, and the health officer

##### 2. COLLECTIVE MEDICAL DOCUMENTATION

This part consists of 4 sections with general information and totals for the communities

- 2.1. Monthly Nosological Report
- 2.2. Monthly Malaria Report
- 2.3. Vaccination Bulletin (only send to Boa Vista if vaccination has taken place)

##### 3. INDIVIDUAL MEDICAL DOCUMENTATION

This part consists of four different types of form varying from case to case:

##### 3.1 Standard Disease Forms

Fill out forms (one for each patient) whenever there is a case of:

- 3.1.1. Malaria
- 3.1.2. Tuberculosis
- 3.1.3. Calazar (visceral leishmaniasis)
- 3.1.4. Pneumonia
- 3.1.5. Diarrhea

##### 3.2. Clinical Synopsis of Serious or Worrying Diseases

Fill out this form for more complicated cases, or ones which develop over a long period of time, thereby requiring a more complete clinical register

##### 3.3. Non-Standard Diseases Form (Simplified Report)

Fill out this form for non-standard diseases which, because of their simplicity, do not warrant a more complete clinical register

##### 3.4. Six-Monthly Check-Up

Every six months, in accordance with a schedule set up by the field doctor, every Yanomami is to undergo a complete check-up. These forms should only be filled out when this check-up takes place.

##### 4. GENERAL INFORMATION

- 4.1. 1. Journey report: a separate sheet should be filled out for each village visited
- 4.2. 2. Census update: to be sent with each report / 3. Yanomami visits
- 4.3. 4. The presence of other non-Yanomami in the area / 5. Participation of interpreters and other Yanomami in the project / 6. Conditions prevailing at the post.
- 4.4. 7. General working conditions /8. Problems and proposed solutions
- 4.5. 9. List of required material / 10. Creative activities

##### 5. CONTROL OF STOCK AT THE POST'S PHARMACY

The pharmacy's stock are to be controlled by taking a daily note of the consumption of each item on the standard list (medicine or material for consumption) and the forwarding of this information on a monthly basis to BV. It is not necessary to send BV the list of medicines and material required. These products will be acquired periodically and sent to the posts' pharmacies based on an analysis of each item.







3. INDIVIDUAL MEDICAL DOCUMENTATION  
3.1. Standard Disease Forms  
3.1.1. Malaria

MALÁRIA

Data: \_\_\_\_/\_\_\_\_/\_\_\_\_ Suspeita: ☐ Confirmado: ☐  
Nome: \_\_\_\_\_ Sexo: \_\_\_\_ Idade: \_\_\_\_ Nº Cadastro: \_\_\_\_\_  
Maloca: \_\_\_\_\_ Posto: \_\_\_\_\_  
Resultado da lâmina: \_\_\_\_\_

ANAMNESE  
Febre: ☐ Início: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Calafrio: ☐ Sintomas Digestivos: ☐  
Sudorese: ☐ Cefaléia: ☐  
Mialgia: ☐

OBS: \_\_\_\_\_

EXAME FÍSICO  
Esplenomegalia: \_\_\_\_\_ IH Icterícia: \_\_\_\_\_  
Hepatomegalia: \_\_\_\_\_ cm do RCD Peso: \_\_\_\_\_ kg  
Anemia: \_\_\_\_\_ Febre: \_\_\_\_\_ C  
Sinais Neurológicos: \_\_\_\_\_

OBS: \_\_\_\_\_

TRATAMENTO  
Início: \_\_\_\_/\_\_\_\_/\_\_\_\_

Medicamento	Dose	N de dias
_____	_____	_____
_____	_____	_____

LÂMINAS DE CONTROLE		
Data	Dia	Resultado
____/____/____	3º	_____
____/____/____	7º	_____
____/____/____	14º	_____

EXAMES COMPLEMENTARES  
\_\_\_\_\_  
\_\_\_\_\_

OBS: \_\_\_\_\_

TUBERCULOSE

Data: \_\_\_\_/\_\_\_\_/\_\_\_\_ Suspeita: ☐ Confirmado: ☐

IDENTIFICAÇÃO  
Nome: \_\_\_\_\_ Sexo: \_\_\_\_ Idade: \_\_\_\_ N Cadastro: \_\_\_\_\_  
Maloca: \_\_\_\_\_ Posto/região: \_\_\_\_\_

ANAMNESE  
Início dos sintomas: \_\_\_\_\_ Febre: \_\_\_\_\_  
Tosse por mais de 21 dias: \_\_\_\_\_  
Emagrecimento: ☐ Expectoração: ☐ Tipo: \_\_\_\_\_  
Dor Pleurítica: ☐ Anorexia: ☐ Hemoptise: ☐  
BCG/Cicatriz Vacinal: ☐ Contato: ☐  
Condições de Vida: \_\_\_\_\_  
Outros: \_\_\_\_\_

EXAME FÍSICO  
Peso: \_\_\_\_\_ Kg Estado Nutricional: \_\_\_\_\_  
Temperatura: \_\_\_\_\_ °C Esplenomegalia: \_\_\_\_\_ IH  
Anemia: \_\_\_\_\_ Hepatomegalia: \_\_\_\_\_ cm RCD  
Linfadenomegalia: Generalizada: \_\_\_\_\_  
Localizada: \_\_\_\_\_  
Ausculta Pulmonar: \_\_\_\_\_  
Ausculta Cardíaca: \_\_\_\_\_  
Outros: \_\_\_\_\_

EXAMES COMPLEMENTARES  
Exame de escarro: 1- \_\_\_\_/\_\_\_\_/\_\_\_\_  
2- \_\_\_\_/\_\_\_\_/\_\_\_\_ 3- \_\_\_\_/\_\_\_\_/\_\_\_\_  
PPD: \_\_\_\_/\_\_\_\_/\_\_\_\_  
RX Tórax: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Outros: \_\_\_\_\_

DIAGNÓSTICO  
TB pulmonar: ☐ TB extra-pulmonar: ☐ TB disseminada: ☐

TRATAMENTO  
Início: \_\_\_\_/\_\_\_\_/\_\_\_\_ Término: \_\_\_\_/\_\_\_\_/\_\_\_\_ Local: \_\_\_\_\_

Esquema: ① ② ③

EVOLUÇÃO  
Cura: ☐ Abandono: ☐ Resistência: ☐  
Esquema Alternativo: \_\_\_\_\_  
OBS: \_\_\_\_\_

ACOMPANHAMENTO  
\_\_\_\_\_  
\_\_\_\_\_





**DIARRHEIA**

Data: \_\_\_\_/\_\_\_\_/\_\_\_\_

Nome: \_\_\_\_\_ Sexo: \_\_\_\_ Idade: \_\_\_\_ N.º Cadastro: \_\_\_\_

Maloca: \_\_\_\_\_ Região/posto: \_\_\_\_\_

**APRESENTAÇÃO**

Duração: \_\_\_\_\_ (dias) Frequência: \_\_\_\_\_ (ao dia)

Líquidas: ☐ Líquido-pastosas: ☐ Pastosas: ☐

Muco: ☐ Pus: ☐ Sangue: ☐

Vômito: ☐ Febre: ☐ Cólica: ☐

Desidratação: ① ② ③

**EXAMES COMPLEMENTARES**

Sedimento das fezes: \_\_\_\_\_

Parasitológico: \_\_\_\_\_

Cultura: \_\_\_\_\_

**TRATAMENTO**

Hidratação oral: \_\_\_\_\_ Hidratação venosa: \_\_\_\_\_

Outros: \_\_\_\_\_

**DOCUMENTAÇÃO MÉDICA INDIVIDUAL**

**RESUMO CLÍNICO  
DE DOENÇAS GRAVES  
OU PRECUPANTES**

DATA: \_\_\_\_/\_\_\_\_/\_\_\_\_

NOME: \_\_\_\_\_

SEXO: \_\_\_\_ IDADE: \_\_\_\_\_

NÚMERO DE CADASTRO: \_\_\_\_\_

MALOCA: \_\_\_\_\_

REGIÃO/POSTO: \_\_\_\_\_



## INFORMAÇÕES GERAIS

## 1. - RELATO DE VIAGENS:

DATA DE SAIDA: \_\_\_\_/\_\_\_\_/\_\_\_\_

DATA DE RETORNO AO POSTO: \_\_\_\_/\_\_\_\_/\_\_\_\_

EQUIPE:

DESTIND:

MOTIVO PRINCIPAL:

MALOCA VISITADA E TEMPO DE PERMANENCIA:

VIA E CONDIÇÕES DE ACESSO:

CONDIÇÕES GERAIS DE SAÚDE ENCONTRADAS:

ATIVIDADES PRINCIPAIS DESENVOLVIDAS:

OBSERVAÇÕES:

## 2 - ATUALIZACAO DO CENSO

REGISTRAR NASCIMENTOS, OBITOS, GESTANTES, COM IDADE GESTACIONAL APROXIMADA, CASAMENTOS, RECLUSÕES PUBERTARIAS, INICIAÇÕES XAMANICAS.

3 - VISITAS DE YANOMAMI - PARA OU DE OUTRAS  
REGIOES:

VISITANTE	MOTIVO VIAGEM	SAÚDE	DATA	PERMANENCIA

4 - PRESENÇA DE OUTROS NAO  
YANOMAMI NA REGIAO. MOTIVO

5 - PARTICIPAÇÃO DOS INTERPRETES E  
OUTROS YANOMAMI

6 - CONDIÇÕES DO POSTO

4.3.

7 - CONDIÇÕES GERAIS DE TRABALHO

8 - PROBLEMAS E SOLUÇÕES PROPOSTAS

4.4.

9 - LISTA DE MATERIAL NECESSARIO  
E/OU QUE NECESSITEM REPAROS

10 - ATIVIDADES COLETIVAS  
REALIZADAS - BUSCA ATIVA, TRATAMENTO DE VERMINOSE,  
VACINACAO



## 5. CONTROL OF STOCK AT THE POST'S PHARMACY

Comissão pela Criação do Parque Yanomami - CCPY

### CONTROLE DE FARMÁCIA - QUANTIDADE USADA

Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

Medicamento	Quantidade Necessária	Quantidade Usada	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Usado	Resto no Arm.
01 - AAS - comprimido 100 mg																																			
02 - AAS - comprimido 500 mg																																			
03 - Ácido fólico - comprimido 5 mg																																			
04 - Adrenalina / Epinefrina - ampola 1 mg																																			
05 - Albendazol - comprimido 100 mg																																			
06 - Albendazol - suspensão 200 mg																																			
07 - Aminoflita - comprimido 100 mg																																			
08 - Aminoflita - ampola 240 mg																																			
09 - Ampicilina - ampola 500 mg																																			
10 - Ampicilina - comprimido 500 mg																																			
11 - Ampicilina - suspensão																																			
12 - Artesunato - ampola 60 mg																																			
13 - Atropina - ampola																																			
14 - Benzato de benzila - frasco																																			
15 - Bicarbonato de sódio - ampola 8.4 %																																			
16 - Calamina - loção																																			
17 - Catalan / voltarem - comprimido																																			
18 - Catalan / voltarem - ampola																																			
19 - Ceftriaxona - ampola 1g																																			
20 - Cimetidina - comprimido 200 mg																																			
21 - Cimetidina - ampola 300 mg																																			
22 - Clindamicina - ampola 600 mg																																			
23 - Clindamicina - comprimido 150 mg																																			
24 - Clorantolol - ampola 500 mg																																			
25 - Clorantolol - colírio 0.5 %																																			
26 - Cloroquina - comprimido 100 mg																																			
27 - Cloroquina - suspensão																																			

Comissão pela Criação do Parque Yanomami - CCPY

### CONTROLE DE FARMÁCIA - QUANTIDADE USADA

Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

Medicamento	Quantidade Necessária	Quantidade Usada	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Usado	Resto no Arm.
28 - Complexo B - ampola																																			
29 - Dexametasona - pomada																																			
30 - Diazepam - ampola 10 mg																																			
31 - Diazepam - comprimidos 10 mg																																			
32 - Dipirona - gotas																																			
33 - Dipirona - ampola 2 ml																																			
34 - Dopamina - ampola 100 mg																																			
35 - Dopamina - ampola 100 mg																																			
36 - Escabin - sabonete																																			
37 - Eucalipto - chá 20g																																			
38 - Fenoterol - gotas																																			
39 - Furacim - pomada 500g																																			
40 - Furosemida - ampola																																			
41 - Gentamicina - ampola 80 mg																																			
42 - Guaco - chá 20g																																			
43 - Hidantal - ampola 250 mg																																			
44 - Hidantal - comprimido																																			
45 - Hidrocortisona - ampola 500 mg																																			
46 - Hidróxido de alumínio - suspensão																																			
47 - Hioscina - ampola 20 mg																																			
48 - Hioscina - comprimido 10 mg																																			
49 - KCl - ampola 10 %																																			
50 - Ketoconazol / Miconazol - comprimido 200 mg																																			
51 - Ketoconazol / Miconazol - pomada																																			
52 - Lidocaina - ampola 2 %																																			
53 - Mantol - frasco 250 ml																																			
54 - Mebendazol - comprimido																																			







Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

[illegible]

Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

[illegible]

Comissão pela Criação do Parque Yanomami - CCPY

**CONTROLE DE FARMÁCIA - QUANTIDADE USADA**

Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

Material de Consumo	Estoque Inicial	Estoque no Fim	Dif. At	Quantidade Enviada	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Estoque no Fim
55 - Seringa descartável 1 ml																																					
56 - Sonda Foley número 18																																					
57 - Sonda Foley número 16																																					
58 - Sonda Foley número 14																																					
59 - Sonda Nasogástrica Levine número 18																																					
60 - Sonda Nasogástrica Levine número 16																																					
61 - Sonda Nasogástrica Levine número 14																																					
62 - Sonda Nasogástrica Levine número 12																																					
63 - Sonda Nasogástrica Levine número 10																																					
64 - Sonda Nasogástrica Levine número 08																																					
65 - Sonda Nasogástrica Levine número 06																																					
66 - Tubo oro-traqueal número 02																																					
67 - Tubo oro-traqueal número 03																																					
68 - Tubo oro-traqueal número 04																																					
69 - Tubo oro-traqueal número 05																																					
70 - Tubo oro-traqueal número 06																																					
71 - Tubo oro-traqueal número 07																																					
72 - Tubo oro-traqueal número 7,5																																					
73 - Tubo oro-traqueal número 8																																					
74 - Tubo oro-traqueal número 8,5																																					
75 - Xílof - litro																																					

Comissão pela Criação do Parque Yanomami - CCPY

**CONTROLE DE FARMÁCIA - QUANTIDADE USADA**

Mês / Ano: \_\_\_\_\_ Posto: \_\_\_\_\_ Responsável: \_\_\_\_\_

Material Permanente	Estoque Inicial	Estoque no Fim	Dif. At	Quantidade Enviada	Material Permanente	Estoque Inicial	Estoque no Fim	Dif. At	Quantidade Enviada
01 - Ambu com máscara adulto					28 - Lâmina reta de laringoscópio pequena				
02 - Ambu com máscara infantil					29 - Lâmpila a gás portátil com relé descartável				
03 - Balde plástico 10 litros com tampa					30 - Lanterna pequena de 2 elementos				
04 - Bandeja inox grande					31 - Laringoscópio médio com 2 elementos				
05 - Bandeja inox pequena					32 - Máscara de oxigênio grande				
06 - Bandeja inox média					33 - Máscara de oxigênio pequena				
07 - Balança portátil adulto					34 - Máscara de nebulização grande				
08 - Balança com concha semi-cilíndrica infantil					35 - Máscara de nebulização pequena				
09 - Caixa inox para sutura					36 - Microscópio bi-ocular portátil luz solar				
10 - Cabo de bisturi					37 - Otoscópio				
11 - Caixa porta-lâmina					38 - Pinça dente-de-rato				
12 - Canaleta para coloração					39 - Pinça para dissecação				
13 - Canaleta marcador de lâmina					40 - Pinça Halsted curva				
14 - Cânula de Guedel grande					41 - Pinça Halsted reta-mesqueto				
15 - Cânula de Guedel média					42 - Pinça Kelly curva				
16 - Cânula de Guedel pequena					43 - Pinça Kelly reta				
17 - Comedoro inox					44 - Pinça Kocher curva				
18 - Compactador-papeiro					45 - Pinça Papan				
19 - Cubo rim					46 - Pinça biventosa 20 cm				
20 - Estetoscópio bi-auricular duo-sonic					47 - Proveta graduada - 50 ml				
21 - Estetoscópio de Pinard					48 - Recipiente inox com tampa 34 x 22 x 5 cm				
22 - Esfigmomanômetro adulto					49 - Tambor inox cilíndrico grande				
23 - Esfigmomanômetro infantil					50 - Tambor inox cilíndrico médio				
24 - Fita métrica					51 - Termômetro				
25 - Jerra inox milimetrada					52 - Yessoura inox grande				
26 - Lâmina curva de laringoscópio grande					53 - Tesoura de ponta fina				
27 - Lâmina curva de laringoscópio média					54 - Tesoura de ponta romba				

# THERAPY TABLE OF THE DSY (YANOMAMI HEALTH DEPARTMENT) FOR TREATMENT OF MALARIA

Ministério da Saúde - Fundação Nacional de Saúde - Diretoria Regional de Roraima

	TABELA I					TABELA II	
	TTT RADICAL DA MALÁRIA P/ P. VIVAX C/ CLOROQUINA 3 DIAS E PRIMAQUINA 14 D					TTT RADICAL P/ P. FALCIPARUM MULTIRESISTENTE COM MEFLOQUINA - DOSE ÚNICA	
DROGAS Idade	CLOROQUINA 1ª D	2ª D	3ª D	PRIMAQUINA Adulto	Inf.	MEFLOQUINA Idade	Comprimidos
menor 6 meses	1/4	1/4	1/4	-	-	3 a 4 anos	1
6 a 11 meses	1/2	1/2	1/2	-	1/2	5 a 6 anos	1 1/4
1 a 2 anos	1	1/2	1/2	-	1/2	7 a 8 anos	1 1/2
3 a 6 anos	1 1/2	1	1	-	1	9 a 10 anos	2
7 a 11 anos	2	1 1/2	1 1/2	-	2	11 a 12 anos	2 1/2
12 a 14 anos	3	2	2	1	-	12 a 14 anos	3
15 mais anos	4	3	3	1	-	mais 15 anos	4

Observação: Seguir a ordem das tabelas com opção para tratamento do P. falciparum.

## DOSAGEM E INTERVALOS - Tabela com Dose Total Diária

CLOROQUINA - 10mg/kg peso no 1o. dia e 7,5mg/kg peso no 2o. e 3o. dia.

PRIMAQUINA - 0,25 mg/kg peso - uma tomada por 14 dias. Iniciar junto com a Cloroquina.  
Não usar em gestantes e crianças abaixo de 6 meses.

QUININO - 25 mg/kg peso dia dividido em 3 tomadas de 8 em 8 horas. Em 2 tomadas de 12 x 12 horas quando impossível em 3. Pode ser utilizado por 3 dias associado a CLINDAMICINA, quando necessário.

CLINDAMICINA (Dalacin C) - 20 mg/kg peso dia dividido em 2 tomadas de 12x12 horas.  
É opção para P. falciparum resistente, é única medicação segura para gestante.

TETRACICLINA - 20 a 30 mg/kg peso dividido em 3 tomadas de 8 x 8 horas. Não usar em gestantes e crianças.

MEFLOQUINA (Larimar ou Larian) - 16 a 20 mg/kg peso - dose única.  
Não usar em gestantes e crianças abaixo de 3 anos.

PALMAQUINA para gametócito de P. falciparum - 0,75 mg/kg peso - dose única - logo pela presença do gametócito ou no 7o. dia. É o triplo da dose do 1o. dia da tabela I. Não usar em gestantes e crianças abaixo de 6 meses.

## APRESENTAÇÃO

CLOROQUINA - AMODIAQUINA - comprimidos 150 mg

PRIMAQUINA - comprimidos para adultos com 15 mg e infantil com 9 mg

QUININO - comprimidos com 500mg e ampolas com 500 mg onde 1 ml = 150 mg.  
Diluir o Quinino injetável para infusão em 2 a 3 horas com 200 ml de S.G. 9%.

TETRACICLINA - comprimidos de 500 mg (cálculo da tabela = 150 mg), comprimidos de 300 mg e ampolas com 600 e 1200 mg.

MEFLOQUINA (Larimer, Larian) - comprimidos de 250 mg.

Para tratar P. falciparum use a Tabela II.

*Yanomami Indians*



Claudia Andujar - 1976