



 **VECTOR BIOLOGY & CONTROL**

Vector Biology & Control Project
1611 North Kent Street, Suite 503
Arlington, Virginia 22209
(703) 527-6500

Telex: 248812 (MSCI UR)
Cable: MSCI Washington, D.C.

HAITI
CONFERENCE ON MALARIA STRATEGY
January 12-18, 1986

by
Dennis G. Carlson, M.D., M.P.H.

AR-012

Author

Dennis G. Carlson, M.D., M.P.H., is Medical Director of the Southeast Community Medical Office in Baltimore, Maryland.

Acknowledgement

Preparation of this document was sponsored by the Vector Biology & Control Project under Contract (No. DPE-5948-C-00-5044-00) to Medical Service Consultants, Inc., Arlington, Virginia, U.S.A., for the Agency for International Development, Office of Health, Bureau for Science and Technology.

Note to the Reader

The conference upon which this report is based occurred shortly before the change in government in Haiti in February 1987. Subsequently, significant changes have been planned for the malaria control program. In August 1986, and in November-December 1986, VBC provided additional consultants to the USAID mission in Port-au-Prince to assist in preparation of an amendment modifying the USAID activities in this field. Readers interested in these further developments are advised to consult these subsequent reports.

INTRODUCTION

I was invited to participate in a Malaria Strategy Conference sponsored by SNEM (Service National des Endemies Majeures) and USAID/Haiti from January 14-17 in Port au Prince. Although an intensive midterm project review had been conducted in September 1984, several technical and management problems face SNEM and USAID. Four experts formed the visiting group of consultants. They met daily with SNEM, USAID, and PAHO. The consultants were Dr. Joel Bremen (CDC/Atlanta), Dr. Lopez Antunano (PAHO), Dr. P. Carnevale (ORSTOM), and Dr. Dennis Carlson (VBC). Dr. Serge Veillard represented the Ministry of Health (DSPP) on the committee (Annex 1).

ACTIVITIES

The committee studied documents, listened to a SNEM staff presentation of current programs, proposals, and problems (Annex 2). Further informal discussions were held with individuals and small groups. Particular attention was given to three specific questions posed by SNEM staff (Annex 3). The group of consultants began formulating its responses on the second day and had frequent group meetings with SNEM staff. A report was drafted in English and translated into French by Dr. Carnevale. On the fourth day, a final summary and discussion was held with the Minister of Health and headquarters staff. A final report in French and English will be issued in the near future. The original English draft is attached (Annex 4).

GENERAL COMMENTS

The malaria problem is increasing. In a total population of 5.9 million people, 4 million are potentially exposed to endemic malaria. Although only 50,000 cases were officially reported last year, some people estimate that 250,000 to 300,000 cases actually occurred. National mortality figures are not available, but one small sample indicated a 1.7 percent case fatality rate.

The national malaria program is in rapid flux. Within the past two years, SNEM's orientation, strategies, and goals have changed profoundly from "eradication" to "control." This has caused some distress and confusion among the SNEM staff. Monitoring and evaluation functions (such as microscopic slide review) are seriously backlogged. Relatively few organized statistical reports are available. There are still many questions about residual insecticide spraying and use of chemotherapy.

The financial base for SNEM is precarious. The present project with SNEM is contracted to continue until about May 1987. USAID provides most of the funds by which SNEM operates. PAHO has two full-time staff members assigned to SNEM activities. A

The financial base for SNEM is precarious. The present project with SNEM is contracted to continue until about May 1987. USAID provides most of the funds by which SNEM operates. PAHO has two full-time staff members assigned to SNEM activities. A small French (ORSTOM) research project is doing epidemiological and entomological studies correlated with clinical epidemiology. Relatively few Haitian or other international funds have been committed to malaria program work. Due to recent political uncertainties, even the present commitments are in doubt.

CURRENT AND POTENTIAL RESOURCES

Recent changes in leadership in SNEM and USAID (the additions of Dr. Mario Alvarez, Director of SNEM, and Dr. Michael White at USAID) may help program activities related to control of malaria and other vector-borne diseases. Members of the team who had previously worked with SNEM noted a higher level of enthusiasm and involvement than on previous visits. The shift from "eradication" to "control" objectives may reduce the relative isolation of SNEM from Ministry of Health (DSPP) activities. The movement toward diversification of the 7,000 volunteer collaborators (known as "VC's" of the "COVOL" network) may provide significant new motivation for the health workers (VCs and their supervisors, the "Health Angels), and increase their effectiveness.*

SPECIFIC CONCLUSIONS AND RECOMMENDATIONS OF THE CONSULTANT GROUP

1. Planning and implementation activities should continue to move toward control rather than eradication of malaria.
2. The major means of control is the curative treatment of fever cases with a single dose of chloroquine (10 mgm/kg) through the COVOL network and supporting infrastructure.
3. Vector control by spraying should be limited to areas of greatest morbidity and mortality as determined by systematic epidemiologic studies.

*NOTE: This report was written before President Duvalier and his government relinquished control of Haiti early this year. The subsequent status of vector biology efforts is not known at time of publication.

4. Despite the preliminary findings of Dr. Brogdon of CDC/Atlanta, fenitrothion is still an effective residual insecticide. It can and should be used if necessary and available.
5. Source control measures (decreasing breeding areas) are useful in the urban and near-urban areas.
6. Larvicidal measures are probably limited in their effectiveness, and their use should be a low priority.
7. Biological control (e.g., larva-eating fish) is unlikely to be of major importance in the near future.
8. Sustained effort should be given to well-planned monitoring and evaluation. Quite a lot of raw data is being produced in a fragmented fashion. However, little is being done to synthesize and interpret this data.
9. SNEM should be sustained and strengthened as a scientific, monitoring, and evaluation center at the national level, and the capacity for vector control by spraying should be maintained.
10. Efforts should continue to incorporate malaria control (especially chemotherapy of fever cases) into general health service at the local, community, and peripheral levels.
11. Financial support for SNEM should be broadened significantly to include other bilateral and multilateral agencies as much as possible.

POTENTIAL FOR TECHNICAL ASSISTANCE

A number of conference participants expressed interest in exploring services which the Vector Biology & Control Project may be able to provide. I had at least one conversation on this conversation with Dr. White, Dr. Alvarez, Dr. Bremen, Dr. Carnevale, Dr. Antunano, and Mr. Bernard Feinstein, an entomologist with PAHO and SNEM. They suggested that VBC might assist with problems including:

1. Development of training curricula for volunteer collaborators and their supervisors;
2. Ways to improve utilization of computer facilities at SNEM;

3. Design of a system to monitor effectiveness of the VC system (Dr. Vishnu has started this);
4. Entomological/ecological research on mosquito behavior, particularly the biting patterns of A. albimanus. Apparently most disease is transmitted in the few hours just before morning, and major peaks of transmission occur for only one to two weeks per year; and
5. Studies on filariasis, which reportedly is increasing.

CDC/Atlanta is firmly involved in studies of chloroquine resistance, fenitrothion resistance, use of bed nets, and, perhaps, some other problems. Other people listed a gamut of additional interests including ways to increase community participation in source control measures, a nationwide survey of vector-borne diseases; snails as vectors, transmission of dengue fever; and phlebotomus studies.

SUMMARY AND CONCLUSIONS

There are many opportunities for VBC to collaborate in Haiti with SNEM, the Faculty of Medicine, and other applied research and service organizations. The Haitian personnel appear to be very open, warm, and eager to advance their programs and their own competencies. I would particularly recommend that an experienced pathobiologist (preferably an entomologist), who is fluent in French and familiar with VBC's capabilities and priorities, visit Haiti soon, perhaps in March or April. (Dr. White said that USAID would not be able to accommodate a visitor sooner due to work load and scheduling pressures.) In preparation, the visitor should conduct a detailed review of CDC's work in Haiti.

ACKNOWLEDGEMENTS

The entire group of consultants was graciously received, accommodated, and attended to by SNEM, USAID, and PAHO. Every effort was made to make the weeks's activities useful, practical, and enjoyable. The consulting team also worked very effectively despite widely divergent cultural and professional backgrounds. Considering the limited time, VBC's management of my briefing and travel arrangements also was extraordinarily well done.

ANNEXES

1. List of conference participants
Preliminary schedule of events
2. SNEM Annual Plan for Malaria Control, 1985-1986
(Revised October 1985)
Background Paper, 1985-1986
3. Specific questions asked by SNEM
White/Alvarez correspondence, December 10, 1985
4. Draft of Malaria Strategy Conference Proceedings,
January 14-18, 1986, SNEM/USAID/PAHO, Port-au-Prince,
Haiti
5. Graphs
 Evolution of Malaria, 1962-1971
 Malaria cases in Zone 3, Summit, 1978-1982
6. SNEM report, August 1985
7. Brogdon report on A. albimanus insecticide
susceptibility
8. Patrick Kelly report on Volunteer Collaborators

Documents 2-8 are available from the Vector Biology & Control Project Vector Control Information Center (VCIC).