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PAHO - CARICOM CARIBBEAN INITIATIVE

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PAHO/CARICOM CARIBBEAN INITIATIVE*

RATIONALE AND BACKGROUND

The desirability and possibility of promoting a special health initiative in the Caribbean stemmed from three facts: the operational strategy of the Pan American Health Organization; the existence in the Caribbean of the need for such an initiative, and the presence of the infrastructure which could make such an initiative feasible.

The Director of the Pan American Health Organization over the past three years has indicated that a geographical as well as a programmatic focus would improve the whole tenor of the Organization's program of technical cooperation. The geographic focus was begun by paying special attention to the Central American Isthmus. In this area, it could be seen clearly that the application of the three ingredients of the Organization's mission has immediate relevance: nowhere was it more obvious that a bridge for peace and understanding was necessary. As soon as the activities were well in train in Central America, the decision was taken to turn attention to the English-speaking Caribbean. The other approach of PAHO - to focus on specific themes - was exemplified by the launching of the campaign to eradicate the transmission of wild poliovirus from the Americas by the year 1990.

The situation of the Caribbean favors the development of a special initiative at this time. The territories are very small and fragile, and very vulnerable to the effects of the all-pervading economic crisis. In the two largest territories there has been a steady and rapid deterioration in the health infrastructure as the health budgets are reduced. The health sector is specially vulnerable, since the reduction in Government expenditure means a reduction in spending in the social sectors. In the health sector the largest expenditure in percentage terms is on personnel: large budget reductions therefore have an inordinate repercussion on the services and their operation. This deterioration in physical infrastructure and services comes at a time when other forces have conditioned the population to expect more. To take Jamaica as an example, until recently there has been steady development of an effective public health service which covered most of the island and which owed its success in part to literacy and increased public awareness of health matters. (1) Today this whole system is under strain and the attempts to implement the primary care strategy is being seriously compromised for lack of resources. (2)

*/ Document presented by Dr. George A.O. Alleyne, Area Director, Health Programs Development to the XXV Meeting of the PAHO Advisory Committee on Health Research, April 1986.

The environment is very important to health and development in the Caribbean. More and more of the countries depend on their national environment for much of their foreign exchange as tourism is or is becoming a significant contributor to the national income.

The subregion is relatively tranquil, but in the Nassau understanding the Caribbean heads of Government said this in relation to the poor economic prospects "such economic conditions breed chronic discontent, crime, violence, and political extremism, putting at risk national cohesion and the democratic process itself." It is against this background that we must see the need to support the social sectors, particularly health.

The Caribbean possesses the infrastructure and the historical antecedents which favor a cooperative effort in health. There are political and financial institutions which are representative of the Region. The Caribbean Community (CARICOM), which has as its supreme body the Conference of Heads of Governments, promotes trade among its members and the formulation of joint policies and actions in different fields. The Organization of Eastern Caribbean States is another formal agency of cooperation between these states which are increasingly sharing services. The Caribbean Development Bank is the major regional financial agency focussing on broad development issues, and with specific interest in some areas related to health, such as environmental protection. The University of the West Indies over the past 37 years has been the major institution responsible for human resources development, specially at the professional level. The University of Guyana has also been increasing its input in terms of manpower development. Throughout the Caribbean there are also several technical colleges and schools which contribute to training in various allied health disciplines.

Finally, there is a tradition of inter island and inter territorial collaboration in many fields including health. The Conference of Ministers Responsible for Health - one of the institutions of the Caribbean Community has adopted many strategies for attacking several of the common health problems and there is a specific health section of CAARICOM which is responsible for coordinating the implementation of the common strategies.

On the basis of the above, the Director of the Pan American Health Organization presented to the meeting of Ministers in the Caribbean his intention of presenting a special initiative in the Caribbean. It was clear from the beginning that this would be a joint effort between PAHO and CARICOM. There was enthusiastic reception by the Ministers at this time and later at a special meeting of Ministers during the meeting of the Directing Council in September 1985, the outlines and content of the initiative were formally accepted. (3)

The initiative is organized around six priority areas: environmental protection, including vector control; human resources development; chronic diseases control and accident prevention; maternal and child health, including population issues. These priority areas were selected on the basis of the health profile of the area and because they represented strategic entry points through which the subregion as a whole could mobilize and make the most productive use of resources in order to strengthen the whole delivery system and improve health status.

The initiative will involve the English speaking Caribbean countries and territories: Antigua and Barbuda, Anguilla, Bahamas, Barbados, Belize, Bermudas, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Lucia, SSt. Vincent and the Grenadines, St. Christopher-Nevis, Trinidad and Tobago and Turks and Caicos Islands.

The overall objective of this initiative is to assist the Governments of the Caribbean to improve the health of their people.

Specific objectives are:

1. To identify and utilize strategic priority area as entry points for facilitating the more productive use of resources and for promoting TCDC.
2. To develop specific projects as vehicles for improving the whole health delivery system and at the same time impacting on the more critical health sector problems.
3. To improve technical cooperation in health in the Caribbean by stimulating intercountry, interagency, and interinstitutional collaboration.
4. To mobilize national and external resources to address the most important problems of the neediest groups and sectors.

THE HEALTH SITUATION IN THE CARIBBEAN

The dominant health issues of the Caribbean people should be the rationale for the selection of the above mentioned priority areas and objectives.

Health Services - The health services of the Caribbean fall under the public assistance model: the governments try to ensure that no person is denied access to medical care on the basis of means. Each country has at least one general hospital which is usually poorly integrated with the rest of the health services and these hospitals are usually staffed by specialists who divide their time between private and public medical

TABLE 1
HUMAN RESOURCES INDICATORS

YEAR	Physicians per 10,000 Inhabitants	YEAR	Dentists per 10,000 Inhabitants	YEAR	Veterinarians per 10,000 Inhabitants	YEAR	Nurses per 10,000 Inhabitants	YEAR	No. of hospital beds per 1,000 Inhabitants
1984	5.0	1984	1.0	-	-	1984	17.	1984	3.6
1984	4.5	1984	0.6	1984	0.3	1984	16.0	1984	6.9
1983	9.8	-	-	1983	0.5	1983	42.9	1983	4.3
1982	8.8	1982	1.2	1982	0.4	1982	30.0	1983	8.0
1984	13.7	1983	4.3	1983	0.9	1983	77.6	1983	6.3
1983	8.0	1983	1.7	1983	0.8	1983	31.7	1983	4.7
1981	11.1	1979	2.4	--	-	1980	34.1	1981	2.7
1983	3.6	1983	0.5	1983	0.3	1983	16.0	1983	3.0
1982	3.8	1982	0.7	1982	0.1	1982	33.7	1983	3.2
1980	1.2	1980	0.2	-	-	1980	6.5	1982	4.5
1979	3.5	1979	0.4	-	-	1979	10.4	1983	2.6
1983	3.4	1983	0.9	1983	0.9	1983	34.1	1983	13.4
1983	5.8	1981	1.1	1981	0.5	1981	56.7	1981	5.6
1982	4.0	1982	0.4	1982	0.2	1980	22.7	1980	4.4
St. Vincent and the Grenadines	2.9	1980	0.6	1982	2.0	1980	10.4	1980	2.4
Trinidad and Tobago	10.5	1983	0.9	1983	0.3	1983	28.3	1980	4.1
Turks & Caicos Islands	9.4	1984	2.7	1984	1.0	1984	20.0	1984	4.6

SOURCE: 1. Health Manpower Statistics for the LDC's CARICOM 1983.
2. Country Narratives (AMPES Document) PAHO 1985.

care. The public health services are the responsibility of the health departments and Medical Officers of Health, and have traditionally focussed mainly on maternal and child health and environmental sanitation.

Table 1 shows that the number of hospital beds per 1000 population ranges from 2.4 in St. Vincent to 13.4 in Montserrat. This does not give the full picture, as many of these are for long stay psychiatric patients and there is no indication of the number of beds available for acute care.

There are no reliable data to show the state of management of the health services, but it is widely acknowledged that this area is very weak. There are frequent shortages of critical supplies in many countries, and in most there is no modern information system to provide the kind of data needed for management planning and evaluation. There is no system by which one can easily compute the detailed costs of institutional care with a view to possible redistribution of expenditures in the sector.

Human Resources - Table 1 also gives simple data on the health manpower available. The physician-population ratios vary widely from 1.2/10,000 in Guyana to 10.5/10,000 in Trinidad and Tobago, and 13.7/10,000 in Bermuda. This may be a reflection of the economic opportunities for medical practice in the countries as well as other aspects of the social environment. With virtual freedom of movement, and great possibilities for emigration to developed countries, there is great difficulty in retaining medical manpower. The global data quoted also give no indication of intercountry disposition - in the larger territories there is gross urban/rural inequality.

The nurses have always constituted the backbone of the public health services and often function as physician extenders. These figures do not show the numbers of allied health personnel who are trained at various subregional centers.

While there is a considerable amount of training at the different centers, there is no clear policy on manpower planning and utilization in the subregion. There are several initiatives in continuing education, but no concerted organized subregional or even national effort.

Indicators of Health Status - The patterns of morbidity and mortality are changing. Life expectancy at birth is increasing, and ranges from 65 in St. Kitts-Nevis (1981) to 73 in Bermuda (1983). The infectious diseases are no longer potent causes of mortality and their place is being taken by the chronic diseases - hypertension and its complications, diabetes mellitus and cancer. The mortality from some of these diseases is shown in Table 2. from which the importance of hypertension can readily be appreciated. The major infectious diseases of children are diarrheal diseases and acute respiratory infections. There is fairly good coverage of the diseases preventable by immunization, and except for

TABLE 2

MORTALITY FOR SELECTED DISEASES IN SEVEN CARIBBEAN COUNTRIES AND THE UNITED STATES

Numbers of Cases and Age Adjusted Rates per 100,000

CHRONIC NON-COMMUNICABLE DISEASE									
COUNTRY	YEAR	All Malignancies		Hypertension		Diabetes		Accidents	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate
Bahamas	1979	158	70.5	28	12.5	17	7.6	45	20.1
Barbados	1978	344	129.7	66	24.9	113	42.6	33	12.4
Dominica	1978	54	66.4	52	64.0	10	12.3	9	11.1
Guyana	1977	327	40.4	247	30.5	159	19.6	-	-
Jamaica	1971	1,583	71.9	638	27.6	593	25.9	549	28.9
St. Vincent	1979	52	45.9	95	83.8	34	30.0	2	1.8
Trinidad & Tobago	1977	673	60.2	439	39.2	544	48.6	238	21.3
United States	1978	396,992	178.7	15,826	7.1	33,841	15.2	52,411	23.6

SOURCE: PAHO Scientific Publication No. 427. HEALTH CONDITIONS IN THE AMERICAS 1977-80.

an outbreak of poliomyelitis in Jamaica where 58 cases were reported, there have been no cases in the Caribbean since 1975.

Severe protein energy malnutrition is not the scourge it used to be in children, but there are indications that the economic crisis may lead to its reappearance to a significant degree.

The environment is continually threatened. Especially in the smaller islands, solid waste disposal is a major problem, and in at least two countries only one quarter of the houses are connected to a pipe borne water supply. Service coverage with sewerage is poor and the majority of the urban population is served with septic tanks and latrines.

THE PRIORITY AREAS

Under each of these there will be a description of the basic objectives and possible research components of the strategies to be followed. These research strategies are set out in very general terms and are sometimes implied within the general objectives rather than described as separate activities to be carried out.

Environmental Health

The overall objectives in this section are:

1. to develop national capabilities for developing and maintaining efforts for improvement of environmental conditions;
2. to reduce the incidence of water and sewage borne diseases;
3. to satisfy the basic human needs of communities in sanitation, and
4. to safeguard the environment against pollution and degradation.

The main areas to be tackled are water and sanitation, sewerage and excreta disposal, and solid waste disposal.

The research issues to be addressed may include:

- Detection of leak control
- Studies on water quality and appropriate technology which can be applied
- Community participation in solid waste management
- Development of appropriate technology for waste water disposal.

Vector control has been included in this area.

The basic objectives of this program is to eradicate aedes aegypti from the Caribbean countries.

The research issues may include:

- Monitoring of vector resistance/susceptibility
- Effects of pesticide use
- Operational research on program organization

Health Manpower Development

The general objectives of this area are:

1. To promote the revision/formulation of policies and plans for health manpower training, utilization and research, within the context of the managerial proces for national health development.
2. To establish subregional cooperative arrangements for the preparation of a leadership cadre of health personnel especially in community health management; for the development of appropriate educational methodology/technology, and for health manpower research.
3. To develop schemes and mechanisms to ensure optimal utilization of trained health personnel.
4. To plan and develop in each country a system of continuing education which has as one of its objectives the enhancement of performance of multidisciplinary team in solving priority problems of communities.
5. To strengthen the existing infrastructure at the Universities and other educational/training institutions, so as to enable them to discharge adequately their national and subregional responsibilities.

The research issues may include:

- Studies focussed on health manpower training and utilization
- Research on educational methods
- Research on manpower planning, and policy formulation in this field.

Chronic Diseases and Accidents

The objectives of this areas are:

1. To attain a better understanding and clearer definition of the situation in the Caribbean countries in regard to the chronic non-communicable diseases and accident-related disorders.
2. To develop integrated community-based control programs together with the organization of diagnostic, therapeutic and rehabilitation services for these disorders.
3. To reduce the frequency and impact of traffic accidents or minimize their public health consequences.

The research issues may include:

- To promote and support the comprehensive analysis of existing information on morbidity, mortality and determinants of hypertension, diabetes and coronary heart disease, cancers of cervix, breast and lung.
- To identify and collaborate in the implementation or utilization of sources and mechanisms for data collection and analysis.
- To stimulate and support the identification and validation of causal associations between diseases and individual and ecological variables.
- To secure the appropriate collection and dissemination of biomedical information in the areas of chronic non-communicable diseases.
- To undertake a study of the cost of traffic injuries to the health services in order to provide decision makers with data, not only to justify financial support of preventive measures, but also to stimulate a review of emergency care system.
- To undertake a study of the present practices for medical assessment of drivers and in the light of epidemiological studies (risk analysis), provide guidelines for the Caribbean.

Strengthening of Health Systems

The objectives of this area are:

1. To strengthen the managerial capacity of the health sector to ensure the efficient and effective operation and productivity of health systems;

2. To improve the coverage and quality of the delivery of health services through the strengthening of national and intercountry networks of health services;
3. To develop effective mechanisms to facilitate community participation in health and health-related matters.

The research issues may include:

- Promotion of health services research in the subregional and national institutions.
- Studies on different alternatives for financing the health services.
- Studies on health technology appropriate for the different levels of care.

Food and Nutrition

The general objectives in this area are:

1. To put into operation the Caribbean Food and Nutrition strategies as already conceived and revised.
2. Assign priority actions to the food components of such strategies and especially to those macro policies which have an effect at the household level.
3. More specifically, to promote the development of the appropriate human resources and the information systems which can be the basis of the effective food and nutrition surveillance.

The research issues may include:

- Development of national nutritional surveillance systems
- Studies on food consumption at household level
- Studies on intrahousehold food safety
- Anemia, its prevalence and causes
- Nutrition in the chronic diseases

Maternal and Child Health and Population

The general objectives of this area are:

1. Reduction in the number of births, especially to younger teenage mothers.

2. Improving the state of perinatal health, thereby
 - a. reducing the incidence of prematurity;
 - b. reducing the incidence of low birth weight infants;
 - c. reducing neonatal morbidity and mortality;
 - d. reducing the incidence of maternal morbidity.
3. To maintain immunization coverage at not less than 90% for the target groups.
4.
 - a. Reduction in the incidence of severity of diarrheal diseases.
 - b. Reduction in the morbidity and mortality from acute respiratory infections.
5.
 - a. Reduction in the incidence of handicapped children.
 - b. Improving the health and well-being of mentally and physically handicapped children.

The research issues may include:

- Sociological studies in relation to teen pregnancies.
- Studies on causes and sequelae of low birth weight.
- Operational research on application of norms in diarrheal disease and acute respiratory infections.

RESEARCH IN THE CARIBBEAN

It has not been possible to carry out the kind of literature search which would capture all or most of the research being carried out in the Caribbean. Fortunately, however, most of the health related research which is carried out is presented at one time or another at the annual scientific meetings of the Commonwealth Caribbean Medical Research Council. The development of this Council and data on papers presented from its inception in 1956 until 1976 have been reviewed previously. (4) One of the striking findings of this review was the role that the University of the West Indies had played in promoting research. It was also evident that there had been a steady shift away from infectious diseases and accounts of isolated cases or problems, to more organized research which looked at a whole range of clinical problems.

In order to determine if there was research being carried out or at least reported in relation to the six priority areas of the initiative, an analysis was carried of the abstracts and papers presented in the last six meetings of the above mentioned Council (1980-1985). (5) Table 3 shows the distribution of papers according to area. There was a predominance of the category "other." However, it was striking to note

Table 3

ABSTRACTS OF THE SCIENTIFIC MEETINGS OF THE CCMRC 1980-1985

YEAR	PRIORITY AREA						
	Chronic Diseases	MCH	Environ. Health	Food & Nutrition	Health Services	Human Resources	Other
1980	12	13	2	6	1	0	26
1981	14	15	0	3	1	0	28
1982	6	19	0	6	1	0	35
1983	7	15	0	2	1	0	38
1984	2	18	1	7	6	0	25
1985	13	12	0	3	6	0	25
Total	54	105	3	27	16	0	180

that of the rest, the largest numbers were in the area of maternal and child health, including family planning, with chronic diseases coming next. No papers were presented in the area of human resources development. This may be because there was little research in this field or because the findings of such studies as there were, had been presented and discussed as internal documents in the teaching institutions. There have been studies done on manpower planning by the University of the West Indies and a very few done with relation to health personnel, but few of these have resulted in formal presentations.

In spite of the importance of the health services and their development, research in this area has been very scanty with only one researcher consistently carrying out studies and reporting the findings. Environmental health has also been poorly served.

The papers were divided according to whether they dealt with infectious or noninfectious problems and the ratio of the two groups was 1:3. As was found in the previous review, the majority of papers came from the University of the West Indies, but there was always a steady stream of contributions from government workers. The various non university specialized units also contributed - particularly the Medical Research Council Unit and Caribbean Epidemiology Center; there were also occasional contributions from the Caribbean Food and Nutrition Unit. Outside of PAHO Centers, six researchers received PAHO grants to assist in their work.

ROLE OF PAHO AND THE ACHR

The above analysis shows that many of the priority areas appear to be poorly represented in the research activities of the subregion. A first step might be to examine other sources of data to determine if, for example, the paucity of research on health manpower is real. If examination of other data confirm these findings then it is appropriate to examine how PAHO might stimulate research in these specific areas. The fact that there is a considerable amount of research in other areas would indicate that there is no paucity of researchers. (6) Although it may be hazardous to extrapolate from Jamaica to the whole Caribbean area, a study on the productivity of scientists in Jamaica over a four-year period showed that if one used a ratio of authors of scientific publications to population, Jamaica was second only to Singapore among the developing countries. (7) Also, when the authors from 30 Latin American countries were enumerated in 1975, Brazil headed the list with 1,047 and Jamaica ranked a respectable 8th with 64 authors. (8) The task is to attract these researchers to the underserved areas. There are various mechanisms for doing this, but this is an issue which the Committee might wish to discuss and advise the Director on how to proceed.

SUMMARY

This paper describes the rationale, background and development to date of the special initiative Caribbean Cooperation in Health: it also gives some data on current research in the Caribbean.

The Pan American Health Organization (PAHO) in close collaboration with the Caribbean Community (CARICOM) has launched a special initiative to focus on some of the priority health problems of the English-speaking Caribbean. The initiative had its origin partly as a result of the policy of PAHO to develop special geographic as well as programmatic focusses for its technical cooperation. The initiative has identified six priority areas for special attention - environmental health, including vector control; human resources development; chronic disease control and accident prevention; strengthening of health systems; food and nutrition, and maternal and child health.

The overall objective is to assist the Governments of the Caribbean to improve the health of their people and the specific objectives are:

1. To identify and utilize strategic priority area as entry points for facilitating the more productive use of resources and for promoting TCDC.
2. To develop specific projects as vehicles for improving the whole health delivery system and at the same time impacting on the more critical health sector problems.
3. To improve technical cooperation in health in the Caribbean by stimulating intercountry, interagency, and interinstitutional collaboration.
4. To mobilize national and external resources to address the most important problems of the neediest groups and sectors.

The major objectives of each priority area are described and the possibilities for research set out.

In order to relate current trends in health research in the Caribbean to the priority areas, an analysis was made of the papers presented to the last six meetings of the Commonwealth Caribbean Medical Research Council.

The analysis shows that maternal and child health is the area most strongly represented and no papers have been presented in the area of human resources development. The causes for this are briefly analyzed and data are provided to show that the paucity of research in these areas is not due to a lack of researchers, but perhaps to a lack of the

appropriate stimulus or inducement. The Committee might consider ways of promoting and stimulating relevant research in the underserved areas if it is felt that there should be a strong research component to PAHO's geographically or thematically focussed health initiatives.

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