Abstracts and Reports

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Communicable Disease Control as a Caribbean Public Health Priority[1]

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Communicable disease was defined by Benenson[4] as "an illness due to a specific infectious agent or its toxic products which arises through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host...." Communicable diseases are numerous, and the known agents capable of causing them number well over a thousand. However, the impact of communicable diseases on public health tends to be understated when analyses of the leading causes of morbidity and mortality are carried out.[5] For example, communicable diseases tend to be specified singly, whereas diseases of the heart and malignant neoplasms are often combined into one group. If communicable diseases were similarly combined, their collective impact would be more obvious.

The English-speaking Caribbean is in transition toward health patterns seen in the more developed world, and several countries no longer have the major communicable disease problems traditionally associated with "the tropics." Nonetheless, the risk of the resurgence of communicable disease is significant, as underlying conditions for susceptibility are still present. In addition, structural adjustment policies in recent years have contributed to a weakened infrastructure by impairing maintenance and limiting implementation of critical control measures, such as water supply and sanitation works. The precarious nature of the situation is illustrated by recent outbreaks of typhoid fever in Jamaica (1990–1991), increased malaria incidence in Suriname and Guyana (with temporary importation into southern Trinidad in 1991), an upswing in tuberculosis in some countries, and the occurrence of cholera outbreaks in Belize, Suriname, and Guyana.

The emergence of epidemic cholera throughout most of Latin America in 1991, and its subsequent extension to Caribbean mainland countries in 1992, stimulated concern among the English-speaking Caribbean countries about their level of preparedness to cope with possible importation. Deteriorating socioeconomic conditions and the consequent

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[4]Benenson AS (ed.). *Control of Communicable Diseases in Man.* 15th ed. Washington, DC: American Public Health Association; 1990.

[5]Plaut RR, Silvi JJ. Communicable disease mortality: now you see it, now you don't. *J Public Health Pol* 1991;12(4):464–474.

communicable disease risk highlighted the apparent absence of communicable disease control from the set of priority areas within the Caribbean Cooperation in Health (CCH) strategy adopted in 1986 by the countries of the Caribbean Community.[6] The Caribbean Epidemiology Center (CAREC) was requested to review this issue, and the following analysis emerged.

CCH AND COMMUNICABLE DISEASE CONTROL

The Caribbean Cooperation in Health strategy recognizes the importance of communicable disease control explicitly in the following four of its seven priority areas:

- *Environmental protection, including vector control:* Water quality is the single most important factor in the epidemiology of diarrheal disease, including cholera, and food protection and personal hygiene are equally fundamental. In addition, all vector-borne diseases are communicable.
- *Maternal and child health:* This area includes the six "EPI diseases" (measles, polio, diphtheria, tetanus, pertussis, tuberculosis)—all communicable and vaccine-preventable. It should be noted that a number of other important communicable diseases are also vaccine-preventable but not included within the core Expanded Program on Immunization. However, such diseases (rubella, hepatitis B) may, in principle, be considered to fall within this category.
- *Acquired immunodeficiency syndrome:* The goals and targets for this area also include other sexually transmitted diseases. All are communicable, spread mostly by personal contact, and all require a similar approach to their prevention/control, including a substantial health education component.
- *Food and nutrition:* There is an interrelationship between nutrition, infection, and immunity, and food safety plays a critical role in the prevention of foodborne diseases.

In addition, other CCH priorities implicitly address organizational and logistical capabilities that need to be well developed in the control of communicable diseases:

- *Human resource development:* Competence in the field of communicable disease control must be sustained for the forseeable future.
- *Strengthening of health systems:* The first and best developed component of the public health information system in most countries is disease surveillance; however, its current level of development is far below the level that is feasible and desirable in order to meet contemporary public health standards in the Caribbean.

Even the remaining priority area, which pertains to chronic *noncommunicable* diseases, includes components relating to some communicable diseases. It should be noted that the U.S. National Cancer Institute estimates that approximately 10% of all cancers have an infectious etiology; an example is the probable role of human papillomavirus in cervical cancer.

In summary, at least four out of seven CCH priorities already directly address critical aspects of communicable disease control, while the remainder also contain elements of activity in this area. *De facto*, communicable disease control is already implied as a priority within CCH, and

[6] *Caribbean Cooperation in Health: Targets and Goals.* Washington, DC (USA), and Georgetown (Guyana): Pan American Health Organization and Caribbean Community Secretariat; [1992].

lack of a unique heading is therefore a function of the classification system. Nevertheless, classification systems do influence the way in which priorities are perceived and acted upon.

The question therefore arises: Should communicable disease control be recognized as an explicit CCH priority?

Beyond cholera—perhaps symbolizing the threat of resurgence of communicable diseases generally—and the diseases already explicitly or implicitly represented in the CCH strategy, there are only a few other communicable diseases that warrant specific attention at this time:

- tuberculosis, which cannot be adequately considered solely within the context of the EPI;
- leprosy, for which CAREC member countries may wish to embark on an eradication initiative, especially in light of the recent WHO endorsement of such a target as feasible;
- leptospirosis, a zoonosis (that is, a communicable disease of animals transmissible to humans) which is thought to be the most frequent disease of this type in the Caribbean.

In terms of magnitude, these three conditions are insufficient to justify a distinct communicable disease grouping within CCH. However, if all communicable diseases of public health importance were to be grouped together (including AIDS/STD, vaccine-preventable diseases, food- and waterborne diseases, vector-borne diseases, and others), such a group would certainly be important enough to justify a distinct priority category, with several major subcategories. However, such a step would necessarily introduce overlap with existing CCH categories, unless those priorities were also modified.

CONCLUSION

CCH priorities already encompass the majority of communicable diseases of public health concern within the English-speaking Caribbean. An additional category to deal with the remaining conditions of public health importance therefore does not appear to be justified on objective grounds. However, this absence could be misinterpreted at a superficial level as lack of recognition of the problems posed by communicable diseases, or even as complacency. It is also possible that fragmentation of communicable disease control throughout the CCH priorities could impair the effective and efficient development and maintenance of relevant skills and resources, depending on how these priorities influence goal setting and organization within individual ministries of health.

If a new category were to be considered, it would make greatest sense to combine the full range of communicable disease control activities within it, with appropriate subcategories, transfering such themes from other priority areas. Such a move would imply a reassessment of all priority areas simultaneously.

If a new category is not to be added to the CCH list at this time, it would nonetheless be desirable to recognize a wider range of communicable disease control goals and targets than those identified at present. In addition, conditions currently not adequately addressed within existing priority areas (e.g., tuberculosis and leprosy) should be linked to one. It would also be useful to include within the CCH strategic documents a matrix that would locate these disease control activities within their respective priority areas.

In their meeting in Barbados in July 1992, the Caribbean Ministers responsible for health decided against constructing a new priority category for communicable diseases at that time but specified

that this question should be reconsidered in the future in the context of a periodic review of the CCH priority areas. There was consensus that regardless of whether or not a distinct CCH priority is established, all aspects of communicable disease surveillance and control should be closely coordinated within countries.

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Food Protection Activities of the Pan American Health Organization

Foodborne illnesses constitute one of the most extensive health problems in the majority of the countries of Latin America and the Caribbean. Food contamination also has an enormous economic impact, both because of direct losses due to the prodigious quantities of contaminated food that must be destroyed each year and because of the costs associated with foodborne disease. Thus, food protection can have great benefits for the health of consumers as well as the economic interests of countries.

To assist the member countries in coping with the challenge of ensuring a safe food supply, the Pan American Health Organization conducts a variety of activities within the framework of the Regional Program of Technical Cooperation in Food Protection, which is administered by the Veterinary Public Health Program. The Program acts through the Pan American Institute for Food Protection and Zoonoses (INPPAZ), located in Buenos Aires, Argentina, and through veterinary public health and food protection consultants in the countries of the Region. INPPAZ provides laboratory support and technical cooperation for the epidemiologic surveillance of foodborne diseases. Keys to implementing the program are the development of policies, plans, and strategies; resource mobilization; information dissemination; training; direct technical assistance; and support of research activities.

In September 1986, the XXII Pan American Sanitary Conference endorsed a Plan of Action for Technical Cooperation in Food Protection for the period 1986–1990. A 1990 evaluation of the accomplishments attained under that plan disclosed that considerable progress had been made in strengthening food protection programs in Latin America and the Caribbean. Numerous national and international organizations, the food industry, and universities had participated with PAHO and technical professionals from throughout the Region in improving awareness of the importance of food protection in promoting health and stimulating economic development. Regional, subregional, and national conferences, seminars, and training courses had been held, and direct technical cooperation had been provided for updating laws and reg-

Source: Pan American Health Organization, Veterinary Public Health Program. Report on Food Protection Activities of the Pan American Health Organization. Document presented in the Eighth Session of the Codex Coordinating Committee for Latin America and the Caribbean, held in Brasília, 16–20 March 1993.