

CHOLERA AS AN INTERNATIONAL HEALTH PROBLEM

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INTRODUCTION

Cholera has played an important, if not decisive, role in the development of concepts of international health. The first international health organizations and activities stem from international sanitary conventions and regulations promulgated mainly because of cholera. The rapid increase in traffic and trade in the last century led the then major powers to meet (in 1851) and to agree upon the "International Sanitary Convention" not only in order to protect themselves against cholera, a "disease of fear", but also to avoid incalculable and needless losses in trade and traffic. The very need for international health organizations such as l'Office international d'Hygiène publique, the Health Section of the League of Nations and the World Health Organization was due to the ever more pressing international health problems caused, to a large extent, by cholera.

Pandemics of cholera ravaged the world in the nineteenth century to such an extent that the old fears are still alive in the memories of many. The last pandemic of the nineteenth century, the sixth, entered into the twentieth century and continued until the end of the first World War. Since then, the violence of cholera has subsided. However, in the second part of this century we are witnessing yet another pandemic, the seventh, which began in 1961 with the spread of El tor vibrios to areas which had been free from cholera for decades. Even though the present pandemic is much less violent than those of the past, the word cholera revives the old connotation of disastrous epidemics and creates panic even among the medical profession.

There is no need for panic nowadays in view of the excellent therapeutic methods which have been developed and which make cholera a disease which can be more effectively and completely treated (with no sequelae) than many other infections. However, the traditional emotional reactions lead to exaggerated reactions on the part of some of the countries, and cholera, essentially a public health problem, has become an international economic problem as well.

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The health aspect of the problem is real but easily dealt with, whereas the economic problem is hypothetical and difficult to resolve.

EXTENT OF THE PROBLEM

Although cholera is endemic in countries of one continent only, it should be borne in mind:

- (1) that the area is inhabited by more than half the total world population, and contains the biggest agglomerations and the largest cities; and
- (2) that, with present-day modes of travel, cholera can spread rapidly from that area to many other parts of the world.

Population-wise, therefore, the problem is much greater than it would appear at first sight.

It should also be noted that this is the least economically developed area of the world and that the chances of eliminating cholera from it in the near future are very meagre.

Very few Asian countries can envisage getting rid of cholera in the foreseeable future so long as the population explosion and the slow pace of development continue to foster poverty, ignorance and poor sanitation, the very conditions on which cholera thrives.

The problem is therefore international from two points of view. Firstly, though it is of direct concern only to the population of Asia, it nevertheless threatens to affect neighbouring countries as well as the rest of the world. Secondly, neither the immediate task of cholera control nor the long-term project of eliminating the endemic foci can succeed without international co-operation and assistance.

APPROACHES TO THE PROBLEM

The need for international action in cholera control is obvious since cholera, like other diseases, does not respect frontiers established by man.

Approaches to international action have varied throughout history and, in this rapidly changing world, it is clear that there is need again now for a change in the old concepts and strategies.

The principle of the "cordon sanitaire" with armed guards, quarantine stations on isolated islands, fumigation and burning of infected houses, etc. is no longer applicable, for it would paralyze travel and trade completely and unnecessarily. The world of today cannot go back to practices of the Middle Ages. The practice of the "cordon sanitaire" is effective in preventing the importation of disease only when there is complete severance of all contacts such as travel and trade with any country where cholera exists. The impracticability of such a policy is obvious.

It is most unfortunate that such out-dated mediaeval ideas still haunt many responsible health administrators, and that even the most knowledgeable may be struck by panic or influenced by other considerations to the extent that they try to find refuge in the traditional "safe" way of dealing with the problem, namely by imposing various restrictions in excess of the International Health Regulations on cholera-affected countries. What they do not realize is that such measures may "boomerang" sooner or later, in the form of retaliations.

The International Health Regulations currently in force aim at combining a maximum of safety with a minimum of interference in international traffic and trade. Notification, if carried out properly, helps adjoining territories to prepare for an emergency. The requirement of a vaccination certificate may not help significantly to prevent the spread of cholera, but it guarantees a certain degree of protection to travellers entering a cholera-affected territory. The Regulations also provide for certain measures to be adopted by infected countries to prevent the exportation of disease, but they are seldom applied. None of these measures should affect international traffic and trade. Thus the problem is not the application of the International Health Regulations, but the imposition of measures in excess of the Regulations.

Application of excessive measures such as restrictions on the importation of various harmless foods cannot be justified. Such measures, aiming at "protection" of the country against cholera, bring about, sooner or later, considerable reductions in international traffic and trade, and cause economic losses and even political disturbances. Those countries which are victims of such action are often ready to retaliate. The end result is often a deterioration in international relations and great economic loss, while cholera continues to spread freely. Resources spent on the enforcement of an ineffective "cordon sanitaire" could be more profitably invested in scientific measures to control and combat cholera.

There is little hope of developing international co-operation in the control of cholera if the ideas leading to "cordon sanitaire" policies are not abandoned. International co-operation can only be based on the application of scientific data and up to date knowledge of cholera.

The main facts to be borne in mind when planning an international cholera control programme are briefly summarized as follows:

1. Immunization is only partially effective, and for a short period, irrespective of the number of doses given to the population in endemic areas.
2. Carriers exist, but not all of them can be detected or treated with certainty. Thus, neither excessive immunization of a person nor examination for the carrier state is entirely effective in preventing the spread of cholera.
3. The viability of vibrios in food-stuffs is very limited, except in the case of milk and milk products; restrictions on imported food and other goods are therefore unwarranted.

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4. Sanitation is effective; a country with good basic health services, and high standards of personal and community hygiene can be considered as non-receptive.

Once it is recognized that cholera is no longer the deadly disease of the past and that there is no need for panic, a realistic international programme for cholera control can be drawn up, based on:

1. Application of only those measures permitted by the International Health Regulations, in order to maintain international traffic and trade and facilitate co-operation.
2. Application of sanitary measures (food control, excreta disposal, safe water supply, sanitation) supported by proper health education in all areas, particularly where there is international traffic, (for example, airports, ports, roads, railways, gathering places, fairs, pilgrimages etc.)
3. Surveillance of cholera on a national basis and exchange of information with other countries, so that they are aware of any possible danger of spread and can take appropriate measures at vulnerable points.

Continuous surveillance of enteric infections and cholera in a country will enable the health authorities to foresee and forestall any danger. If information thus collected is regularly and freely provided to other countries, this will engender trust and respect for the efficiency and sincerity of the country. The hiding of facts about cholera (which is rarely successful in these days of extensive travel) creates distrust, and is conducive to the introduction of excessive measures. It is interesting to note that excessive restrictions have rarely been imposed exclusively against India, who regularly reports cholera and leaves no scope for suspicions.

Bilateral or multilateral international co-operation in surveillance and control opens the way to mutual understanding, negotiations and assistance in solving the problems posed by the international spread of cholera. Close co-operation established in this way between countries will enable them to find ways and means of controlling cholera without imposing excessive restrictions on trade and travel. When full information is available it will often be found that the danger is limited to a certain border area or population and that it is not wide-spread.

There is need for a change of attitude in many countries. The medical profession, with its ability to understand the biological aspects of the problem, should enlighten the non-medical administrators who often have to decide on the measures to be taken. An able non-medical administrator with a sense of political responsibility will readily recognize which type of action will best serve the interests of his country if medical staff present him with the facts about cholera.

Much education or re-education is needed in this field in order to change the attitude of all concerned.

NEW PROSPECTS

Experience gained from the application of excessive measures in the China seas and the Pacific in the early days of the present pandemic has led to the development of bilateral and multilateral co-operation in the control of cholera between countries in that area. The fact that cholera El tor is endemic in the Philippines is no longer a cause for disturbances in traffic and trade of that country with Japan. The programme launched in the Philippines for control and eradication of cholera is being directly assisted by the Japanese Government and is bringing immense benefits to both countries with the development of tourism, trade and international co-operation in this part of the world. Cholera, instead of being a cause of distrust and tension, as is the case in some other parts of the world, has led to ever-improving bilateral co-operation and trust. This is only one example, but there are others, and they deserve to be followed.

The immediate future of cholera is uncertain; it may stay within the confines of its endemic foci in Asia, or it may spread further afield. Whatever happens, the following points should be borne in mind:

Treatment of cholera is now so effective that nobody should die of this disease if diagnostic and treatment facilities are readily available. Countries which have such resources have no reason to panic, even when invaded by cholera.

Cholera can now be dealt with effectively on an international basis without any restrictions on trade and traffic.

The success of international action depends on the removal of prejudices against cholera among the population and in health administrations.