

REPORT
ON
PRELIMINARY SURVEY ON CONTROL MEASURES
AGAINST INFECTIOUS DISEASES IN THAILAND

April, 1981

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PREFACE

The Japan International Cooperation Agency has decided to make a basic study on the present status of infectious diseases in Thailand with a view to finding guidelines and collecting data necessary for the effective and smooth implementation of medical cooperation projects in Thailand.

The Agency conducted the study by dispatching a study team headed by Dr. Koichi Nakazawa, Director of Medical Cooperation Department of the JICA to Thailand from August 11 to September 2 of 1980.

The study team visited Bangkok and other parts of Thailand and had useful discussions and consultation with officials concerned of Thailand.

This summary report is the results of this study and further studies in Japan.

I wish to take an opportunity to express my deep appreciation to the officials concerned of the Government of Thailand for their full cooperation and kind hospitality extended to the team. I hope that this report will be useful for the further development of the health programs in Thailand and that it will also contribute to promoting the friendly relations existing between the two countries.

April, 1981

Masao Hasegawa
Executive Director,
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S U M M A R Y

1. The Present Status of Infectious Diseases and Measures Taken to Control Them in Thailand

In Thailand, as well as in other developing countries, the high incidence of infectious diseases is one of the most serious health problems. This fact is clearly shown by various indicators, such as morbidity rates, mortality rates, case fatality rates, crude mortality rates according to the causes of death, infant mortality rates, etc. Food- and waterborne diseases requiring immediate control measures include cholera, bacillary dysentery, typhoid fever, infectious hepatitis, poliomyelitis, acute diarrhea of unknown etiology, and food poisoning. Tuberculosis and leprosy have a high prevalence rate, too. The morbidity and mortality rates of vectorborne diseases, such as malaria, dengue hemorrhagic fever, and encephalitis, are also high. Whooping cough, diphtheria, and tetanus are also prevalent.

Although such existing conditions have been caused by low per capita income, high population growth rate, malnutrition, poor environmental sanitation, etc., natural effects of climate, including high temperature and humidity, cannot be ignored.

The importance of the infectious disease problem is well recognized and the efforts made in many sectors to deal with the problem have produced noticeable results. Progress in health legislation has also been made; for instance, the Communicable Disease Act was revised in 1980 for the purpose of more effectively controlling and eradicating various kinds of diseases and to provide stringent control measures when necessary. The organization of the health administrative has been designed to operate effectively. Efforts have been made to strengthen and improve the medical care and health services and to make better coverage available throughout the country. Progress is also being made in the environmental sanitation program. Health statistics, which are fundamental in developing control measures for infectious diseases, are being periodically compiled, data is being

processed rapidly, and the statistics program is fulfilling its intended systematic function. Because proper diagnosis of disease is dependent on reliable laboratory data, health authorities are making every effort to improve the capabilities of public health laboratories; this is being done by systematically training various health personnel. An immunization program, modeled on WHO's "Expanded Programme on Immunization", has also been promoted as a part of the fourth five-year program.

In parallel with the improvement of the existing health personnel, emphasis is being placed on making the most of nonspecialists. Control measures for the eradication of infectious diseases have been included in the community health development plan under the primary health care scheme. This means that provisions for control measures for infectious diseases have been duly included in the frameworks of both the Fourth National Economic and Social Development Plan and the Public Health Development Plan.

In spite of these efforts, however, infectious diseases still remain a major problem among the people of Thailand, and it is difficult to control and eradicate the diseases. Gastrointestinal diseases, in particular, have greatly increased in number during the past few years, and the same tendency can be observed in some respiratory diseases. This increase has become more apparent due to better health services (surveillance systems) in villages, improved diagnostic techniques, enforced notification, etc. But detection alone does not explain the increase in gastrointestinal and respiratory diseases; a substantial increase has resulted from changes in the social environment; for instance, the advance of transportation systems has increased the mobility of both human beings and commodities (food); other contributing factors include crowded living conditions in large cities, the urbanization of villages, etc. Moreover, these tendencies become aggravated when control measures for infectious diseases are not included in social improvement plans. In Thailand, although provision has been made for control and eradication of infectious diseases on the administrative level and within national medical

service organizations, the effort is disproportionate to the need and far more must be done in order to cope with infectious disease problems.

Generally speaking, the control measures for infectious diseases in Thailand are aimed at the reduction of mortality and do not extend as far as positive preventive activities. Because Thailand, with its limited human and financial resources, is still in the initial stages of improving the effectiveness and efficiency of its medical care and health services, it is experiencing the inevitable pains of growth, which often means delays in program implementation.

2. Prevention and Control of Infectious Diseases in Thailand

Obviously, a plan for the comprehensive improvement of medical care and health services should be well balanced, giving equal attention to the control of other diseases as well as to infectious diseases. In Thailand, however, first priority should be given to controlling infectious diseases because the high incidence of infectious diseases has grave health and socioeconomic implications. Moreover, these kinds of diseases, by their very nature of spreading from one person to another, could "explode" at any time in epidemic proportions. With the changes in the social environment currently observed in Thailand, it is conceivable that the prevalence of communicable disease could shift from an endemic type to an epidemic one. Control measures should be implemented in order to avoid such a catastrophe.

Curative measures for "notified" cases of infectious diseases have been emphasized in the past, but future efforts should move positively toward the preventive aspect of the problem; this can be achieved by analyzing what is causing a particular disease to spread. The following three points suggest ways of accomplishing this goal:

- (1) The movement to improve the medical care and health services, which has already been started, should be continued. The number of hospital beds given to the special treatment of patients with communicable diseases should be increased. It is most important that the patients remain in the hospital until their full, pathological recovery is certain.
- (2) Etiological diagnostic techniques should further be encouraged. Diagnosis should not stop with the patient who has visited the hospital for treatment; on the contrary, especially in epidemic cases, health service personnel must attempt to find those people infected with communicable diseases who have not sought medical treatment and cases of in apparent infection. This diagnostic process should not be limited to "Dangerous" infectious diseases but should include other "Notifiable" infectious diseases. Moreover, sanitation control measures

should be taken to guard against water and food contamination, thus helping to prevent infectious gastrointestinal diseases.

- (3) A surveillance system, emphasizing an epidemiological approach, should be implemented. The scope of the system should be broad enough to encompass the following: (a) to search for infected persons who have not sought medical treatment, (b) to be on the alert for undiscovered outbreaks of diseases, (c) to determine the root of transmission and infectious sources of the epidemic, (d) to develop effective preventive and control measures, (e) to evaluate the effects of those measures. Some organized form of collaboration is essential among the health and medical personnel concerned -- that is, administrators, clinical doctors, laboratory technicians, health workers, etc. -- especially if laboratory-originated information is to be used effectively and efficiently.

As for implementing the three points mentioned above, priority should be given to the control and eradication of infectious diseases at the district level, where prevention, treatment, and management can be introduced and maintained as an integral unit. Further study will be required to determine whether it is more advantageous to create a totally new organizational structure specifically with regard to controlling infectious diseases, or whether it would be better to improve the existing organizational structure.

If upgrading the medical care and health services at the district level proves effective, it might then be possible to strengthen and to clarify the essential activities of those services at a higher level (i.e., the provincial level) such as secondary medical services and reference services for district level.

Immunization programs should be broadened in scope in order to serve more people, and those vaccines that are known to be efficacious should be more widely used.

Another factor that should not be overlooked is the need for protection against environmental health hazards, especially those which cause infectious diseases. Rapid urbanization of villages and gravitation of population to the cities contribute to the cause of serious environmental pollution and, in particular, to the increase of enteric communicable diseases, plans for the control of which should be drawn up as soon as possible.

Finally, it is important in the development of Thailand's health services that programs be launched for-

- A. the promotion of overall control measures for food- and waterborne diseases.
- B. The promotion of control measures for communicable diseases through the improvement of food sanitation.
- C. The promotion of control measures for communicable diseases through immunization.

Acknowledgement: We should like to mention that the research for this paper could not have been completed without the kind assistance and cooperation of the Ministry of Public Health, the medical departments of Thai universities, and various public health organizations. We are especially indebted to Dr. Prakorb Tuchinda, the Under-Secretary of State for Public Health. Special thanks are extended to two members of the Ministry of Public Health, Dr. Thavaj Chayaniyayodohin and Mr. Theera Rathavorn, who accompanied us for the part of our survey trip that included the Northern, Northeastern, and Southern districts of Thailand. Miss Orasa Suthienkul, from Mahidol University, was our constant companion and source of help for the entire period our survey team was in Thailand. To all the people who contributed to the survey team's project, we wish to express our heartfelt gratitude.

Preliminary Survey on Control Measures
against Infectious Diseases in Thailand

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14 Thu.

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16 Sat. Lv. Bangkok - Ar. Chieng Mai

17 Sun. Holiday

18 Mon.

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P.M. Tuberculosis Center, Malaria Center

Aug. 19 Tue.

A.M. Sarapi District Hospital

P.M. Lv. Chieng Mai - Ar. Bangkok

20 Wed.

A.M. Government Pharmaceutic Organization, Thai Red Cross

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21 Thu. Lv. Bangkok - Ar. Ubon

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P.M. Ubon Provincial Hospital

22 Fri.

A.M. Piboonmungsharn District Hospital

P.M. Kuangnai District Health Office, Bangkok Midwifery Center,
Child Center

23 Sat. Lv. Ubon - Ar. Bangkok

24 Sun.

25 Mon.

A.M. Ministry of Public Health

P.M. The Japanese Embassy

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26 Tue. Lv. Bangkok - Ar. Songkla

Songkla Provincial Hospital

27 Wed.

A.M. Southern Center of Communicable Disease Control

Nunkao 2nd Class Health Center

P.M. Haadyai Provincial Hospital

28 Thu.

A.M. Malaria Eradication Center

P.M. Ranod District Hospital

Aug. 29 Fri.

A.M. Sanitation Center

P.M. Songkla Health Office

30 Sat. Lv. Songkla - Ar. Bangkok

31 Sun. Holiday

Sep. 1 Mon.

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2 Tue. Lv. Bangkok - Ar. Tokyo

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