AN OUTBREAK OF CHOLERA IN MALACCA

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Malacca is a town with a population of 17,000 situated on the west coast of the Federation of Malaya; it is sometimes referred to as the “City of Dreams.” The main sanitary disposal facilities are by means of bucket latrines; water-borne sewage is a rarity although there are a few septic tanks. Malacca receives its water supply from two main sources—Sungei Putat River, a tributary of the Malacca River, from which the reservoir at Bukit Sebokor is supplied, and Asahan reservoir which provides an emergency supply. The main bucket-latrine washing station is situated on the banks of the Malacca River about two miles above the water-supply intake from the Sungei Putat River; its activities were suspended soon after the cholera outbreak occurred. Camp Terendak, which is occupied by units of 28 Commonwealth Infantry Brigade Group, is situated about 12 miles from Malacca town and accommodates approximately 10,000 Service personnel and their families. The water supply for the Camp is drawn from the Malacca Municipal supply and is pumped into two reservoirs each of 1,000,000 gallons capacity.

It was announced over Radio Malaya on the evening of 10th May, 1963, that Malacca had been declared a cholera-infected area. At that time there had been two deaths and approximately 50 confirmed cases. An emergency meeting with the civilian local health authorities, attended by the Senior Medical Officer, Camp Terendak, was held in the Malacca General Hospital that night. The Deputy Assistant-Director of Army Health, 17 Gurkha Division, Malaya Area, arrived in Camp Terendak the next morning to assist the Senior Medical Officer with the precautionary measures to be taken in the Camp. The Chief Medical and Health Officer, Malacca, requested that the town be put out-of-bounds to troops and their families; this was implemented immediately.

The first case of cholera was admitted to the Malacca General Hospital on 29th April, 1963. Preliminary reports indicated that the vibrio incriminated belonged to the Ogawa strain and it was subsequently shown by agglutination tests carried out by the Institute of Medical Research, Kuala Lumpur, that this organism was the El tor vibrio.

The necessary preventive measures were outlined to the Staff by the Senior Medical Officer at a conference held on the morning of 11th May, 1963. Foodstuffs entering the Cantonment were controlled by the Depot Police, and NAAFI opened a special shop where the Asian staff in the camp could purchase their own food supplies.

Chlorine estimations were carried out on the water in the Camp reservoir and in the swimming pools, the aim being to keep the residual chlorine at a level of 0.6 ppm.
Instructions were issued to families on the necessity for boiling water even though it was chlorinated; this was thought necessary because the families in "hirings" outside the Cantonment received their water direct from the Municipal supply. On a number of occasions the residual chlorine content of the water entering the camp reservoir from the Malacca mains was nil.

Vaccination with cholera vaccine was instituted with a system of priorities as follows, although vaccination was not refused anyone who asked for it.

(a) Families living in accommodation outside the Camp.
(b) All medical personnel, their families and house servants.
(c) All food and water handlers.
(d) All personnel due to leave the country.
(e) All others not covered by above.

Vaccination teams were placed at the disposal of the civil health authorities and 5,000 doses of vaccines were supplied. When it appeared likely that the outbreak might spread throughout Malacca state and its neighbours, 100 beds complete with linen, and a supply of intravenous fluids were put at the disposal of Malacca's Chief Medical and Health Officer. Civilian police manned road blocks to control the movements of foodstuffs out of the state; at these road blocks cholera vaccination certificates were scrutinized, and, if necessary, cholera vaccination carried out. It was agreed, after consultation with Malacca's Chief Medical Officer, that the Army Form 101 was acceptable in lieu of the civilian certificate which required the signature of the Malacca Health Authority.

Daily conferences were held at Malacca General Hospital between S.M.O., D.A.D A.H., C.M.O. Malacca and a representative from the Health Ministry in Kuala Lumpur; a spot-map was maintained of the areas in which cases occurred. The mineral water companies supplying soft drinks to the camp were inspected by the D.A.D.A.H. and their sources of water and its treatment investigated. A general inspection of the Camp area showed evidence of intensive fly-breeding particularly in the Kongsi areas. The areas were treated with insecticidal fogs and the non-European staff impressed with the need for maintaining a high standard of hygiene—advice which was honoured more in the breach than in the observance.

Previous to the outbreak of cholera, the water supply in Malacca had a high saline content; this was due to the fact that, because of a prolonged drought, the level of the Sungei Putat River fell and resulted in brackish tidal water being drawn into the pumping station. The saline water caused brisk vomiting and diarrhoea, and infants refused to accept bottle feeds.

Malacca was finally declared free of cholera on 5th August, 1963. During this outbreak not one case of cholera occurred amongst the military population or their dependants.