## INSTITUTE OF CURRENT WORLD AFFAIRS

RFG - 3 Health Problems in an Emergency District c/o Barclays Bank Queensway Nairobi, Kenya December 23, 1954

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Dear Mr. Rogers:

Ever since the beginning of the Mau Mau emergency in Kenya typhoid fever has been on the increase, until some of the recent epidemics have assumed alarming proportions. The main source of infection has been Nairobi where typhoid is an endemic disease. There the incidence of typhoid rose sharply with the forced movements of large numbers of Africans and the disruption of public services in the native locations as a result of police sweeps and other security measures in the city. The worst outbreaks, though, have been in the hastily constructed detention camps where tens of thousands of Mau Mau adherents are imprisoned. The most notorious epidemic occurred at Manyani Detention Camp which is located near Voi. Over one hundred deaths from typhoid have already been reported from there. Smaller epidemics of the disease have also broken out in different parts of the region in which Mau Mau is active. One of these areas is in Kiambu District near Nairobi, where I recently spent several weeks consulting with the medical staff of the government and touring through the Kikuyu Land Unit (commonly called Kikuyu Resrve) with the Health Officer.

The annual incidence of typhoid climbed steadily in Kiambu District to a high of 95 cases for 1953; but in 1954 some 366 cases had already been reported by the 1st of November. In order to get a better idea of the distribution of the epidemic, each case was plotted on a one-inch map of the District by sticking in a little red flag. It then became clearly evident that the great concentration of cases was in a narrow corridor of Reserve which connects the Dagoretti Location adjoining Nairobi with the main portion of the Kikuyu Reserve. After studying the map, the medical authorities at first reasoned that typhoid carriers from Nairobi vicinity were passing through the corridor on their way to and from the Reserve. The narrow corridor of Reserve running north of Kiambu Township and hemmed in by European estates on both sides acted as a bottleneck—so it was argued—in which the cases of typhoid were concentrated. Since the movements of Kikuyu are severely restricted by emergency regulations, it was assumed that the carriers were Mau Mau gangsters making illegal journeys.

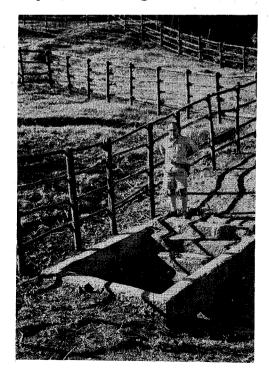
Although this interpretation appeared plausible at first sight, it was challenged by the District Health Officer Mr. Waddicar, who pointed out that the ridges and streams which are characteristic of the Kikuyu country cut squarely across the corridor, thus rendering it unsuitable as a communications route. He also indicated that the main roads from Nairobi run across the corridor in connecting the southern and northern areas of European farm land. His alternative theory was that the terrorists were traveling illegally

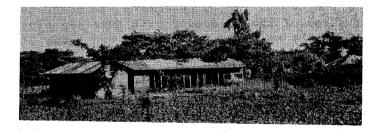
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along the main roads in their journeys to and from Nairobi. A number of native cafes and shops are located on these roads as they pass through the corridor of Reserve. According to Mr. Waddicar, these were frequented by the Kikuyu coming from Nairobi, some of whom were typhoid carriers, and thus they became foci of infection for the spread of the disease in the area.

In planning a campaign to fight the epidemic, the Waddicar theory was accepted in essentials, though final proof was not forthcoming since there is no accurate tally on the secret movements of gangsters. The campaign that was decided on involved three principle measures. First of all, the native cafes were inspected and higher standards of sanitary precautions were enforced. A number of them were closed. Secondly, a plan was worked out for the selective inoculation with T.A.B. of that portion of the African population which had been exposed to infection. The third measure concerned the safeguarding of the water supplies in affected parts of the Reserve.

As one drives out of Nairobi on the main Nakuru road he sees a large number of empty buildings which were once thriving little Kikuyu shops and eating places. Starting on the very outskirts of Nairobi, he will find the large Dagoretti Native Market now closed, and as he passes through the other kikuyu Locations near Nairobi he will find the roadside buildings empty and lifeless. These were all hotbeds of Mau Mau plotting, and the only solution seemed to be to close them up. In the early days of Mau Mau, the greatest activity took place in the Nairobi area and in the more remote parts of the Reserve near the forest edge. The Kiambu corridor was comparatively quiet then, and the native business places were not disturbed. More recently, with better police control in the Nairobi vicinity and increased military pressure in the forest areas, the center of terrorist activity has moved to Kiambu District. In the last few months more gansters have been killed or captured there than in the other two Districts—Fort Hall and Nyeri—of the Kikuyu Reserve together. The medical authorities believe that this increased

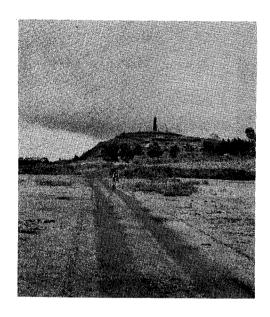




Abandoned Kikuyu Shops

Mr. Waddicar by a Protected Spring

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Kikuyu Guard Post

Kiambu Midwives

Mau Mau activity is an important cause of the present typhoid epidemic in Kiambu and recommend the closest supervision of native shops and eating places.

In planning a program of T.A.B. inoculations, it was decided to immunize only the people who were definitely exposed to infection. heavily infected corridor the entire population will be inoculated. other parts of the District, the little red flags indicating typhoid cases are scattered wery thinly over the map. Wherever a case has been reported it is planned to inoculate the families who draw drinking water from the same stream below the infected point. The topography of the Kikuyu Reserve, particularly that part of it lying in Kiambu District, consists of a series of parallel streams separated by ridges which are occupied by families or larger social divisions of thetribe. Under the emergency regulations there is very little movement of population from ridge to ridge. Thus it can be safely assumed that the water of an infected stream will only be used by the people who permanently inhabit the ridges which border it. By following this scheme, it is estimated that only 100,000 people will have to be inoculated out of a population of 350,000 for the District. The actual inoculation is already under way. A team of African Health Assistants have been at work for some time spreading counter-propaganda through the District against the prevailing rumour that the injections are for the purpose of sterilizing the Kikuyu Women.

The plan for safeguarding the water supply involves chiefly a program for building "protected springs." This construction has actually been going on for several years in a desultory fashion but the results were not very satisfactory. Mr. Waddicar has now designed a new model which is built of cement and local stone and costs only 70 shillings. The water from a spring is piped to a concrete tank which is sited at a drainage-free location and surrounded by a fenced-off cleared area, leaving a single convenient approach for drawing water. The outlet from the tank leads to a slab which can be used for laundry purposes. About 30 of these protected



Kiambu Coffee Farm

Askaris Hunting Terrorists Who Hide among the Coffee Trees



springs have already been built where they are most needed. A trained Health Assistant and several masons are employed full-time on their construction. The ultimate aim is to provide protected springs for the whole District, no that drinking water need no longer be taken from open streams. In this way it is hoped that other gastrointestinal infections as well as typhoid will be greatly reduced.

Kiambu District is divided into Kikuyu Reserve and alienated European land. Most of the land which the Kikuyu claim was stolen from them is located in the Kiambu alienated area which includes some of the richest coffee land in Kenya. There is no exaggeration in the name "Millionaire's Row" which is commonly applied to the road running from Kiambu Township past the Golf Club. With coffee now selling at £500 a ton, some of these farms are said to produce an annual income of as much as £80,000. Politically the District is divided into four Divisions. The administrative headquerters

<sup>&</sup>lt;sup>1</sup>The maps of the District which are now available from the Lands and Surveys Office do not show the boundaries of the present Divisions.

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or "Boma" for the District is located at Kiambu Township eight miles north of Nairobi. Formerly the entire political staff were stationed there; they would administer the District by making periodic safaris to the different African Locations. But early in the emergency, as part of a policy of "closer administration," it was decided to station a District Officer (D.O.) permanently in each of the four Divisions which had been newly demarcated in the District. The District boma and the Division sub-bomas are all protected by barbed wire barricades with the entrances guarded by armed sentries. Police askaris are to be seen everywhere. There are several categories of these which can be readily distinguished by the colors of their jerseys—blue for Kenya Police, red for Division Police, and brown for District Police. In traveling through the Native Locations, the country is given a medieval appearance by the numerous Kikuyu Guard posts with their moats, spiked palisades, and watch-towers.

The medical services are directed by Dr. Reidy, the District Medical Officer (D.M.O.), who also runs the 160-bed District Hospital at Kiembu Township with the help of a second Medical Officer -- a woman at present. The next largest medical institution in the District is a 100-bed hospital at Kikuyu operated by the Church of Scotland Mission. This hospital, which serves Kikuyu Division, is subsidized by the government and thus comes under the supervision of the D.M.O. At Tigoni, near the D.O.'s boma in Limuru Division, Government maintains a 32-bed "cottage hospital." The Medical Officer in charge of Tigoni Hospital, Dr. De Souza, was recently slashed by Mau Mau, and the hospital is now being managed by an African Hospital Assistant while waiting for a replacement. Each of the other two Divisions-Githunguri and Gatundu-possesses a Health Center manned by a staff of five trained Africans. The more remote parts of the District are served by dispensaries of which there are 11 altogether -- 8 operated by missions and 3 by African District Councils. The District Health Officer heads a staff of 50 Africans ranging in rank from a Health Worker (equal to the highest African medical rank) down to Sanitary Assistants who are trained for simple duties in their own Locations.

Besides the usual run of diseases seen in any African hospital, Kiambu Hospital is confronted with three special problems: these are Mau Mau casualties, typhoid fever, and tuberculosis. The Mau Mau patients are mostly cases of gunshot wounds, but some of the typhoid patients are convicted terrorists. These patients are not kept together in one ward, as at King George VI Hospital in Nairobi, but are scattered among the other patients in different wards. To prevent escape they are manacled to their beds.

The importance of tuberculosis among diseases of Africans has been receiving increased recognition in recent years. The Kenya Medical Department is coming to realize that tuberculosis will remain one of the most serious medical problems of the future as amlaria and other common tropical diseases are brought under better control. Although no accurate figures are yet available, it is generally believed that the incidence of tuberculosis is higher among the Kikuyu than the other tribes of East Africa. Dr. Reidy realized this soon after he was posted to Kiambu, and for two years he has been working hard to build up a service for the diagnosis and treatment of tuberculosis in the District. He now has 400 patients on his list who are under treatment or observation, and 35 hospital beds are set aside for

the use of the more serious cases. Patients are kept in the hospital for six weeks on the average. Thereafter they are treated as outpatients, reporting once a month for a check-up and medicine. Hospital patients are treated with streptomycin injections, isoniozid, and P.A.S. About 30% are treated surgically with pneumoperitoneum, pneumothorax, and crushing the phrenic nerve. The object of these procedures is to collapse the affected lung and put it at rest. Patients who require thoracoplastic operations are sent to Nairobi and thus leave the control of Kiambu Hospital. Outpatients are treated with oral medication. A clinic for these patients is held every Thursday afternoon. For evaluating the progress of his tuberculous patients, Dr. Reidy depends mainly on weight changes, sputum examination, and erythrocyte sedimentation rate. Chest X-rays are taken at six-month intervals.

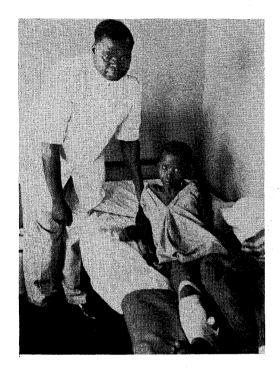
Although he keeps careful records, Dr. Reidy has not yet had time to analyze them or calculate fully the results of his methods of treatment. His duties and responsibilities, increased by emergency conditions, keep him very busy. For relaxation he tries to take Saturday afternoons off for golf and occasionally plays in competitions on the Nairobi Medical Golf Team. He plays with an unorthodox looping swing that sends the ball a mile and makes him a formidable opponent, except on days when he has trouble staying on the fairways. The progress of all Kiambu patients who were treated in 1953 has been worked out, using only X-ray findings, which is not an adequate criterion in itself. These results were as follows:

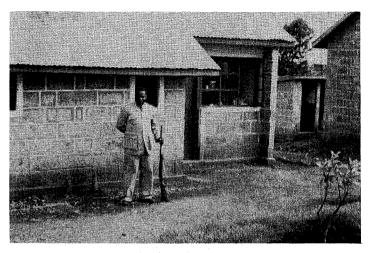
| Cured                | 13.04% |
|----------------------|--------|
| Almost cured         | 10.86  |
| Marked improvement   | 36.96  |
| Moderate improvement | 13.04  |
| Slight improvement   | 4.35   |
| No change            | 17.40  |
| Deterioration        | 4.39   |

The exact incidence of tuberculosis is not known and Dr. Reidy will not even attempt a guess until at least a preliminary survey has been made. All authorities agree, however, that it is much higher in East Africa than was previously thought.

In regard to the best methods of treatment of tuberculosis in Kenya, there are several points of controversy. One of these concerns the relative value of hospitalization as against the outpatient management of tribal natives. Dr. Reidy favors outpatient treatment wherever feasible, because by that method a much larger number of patients can be treated with available resources and medical personnel. The other view, which seems to be held at Port Reitz Chest Hospital in Mombasa (the main treatment center for tuberculosis in Kenya), stresses the fact that living conditions and housing in the Reserves are such as to favor the spread of the infection by outpatients who still have tubercle bacilli in their sputum. Supporters of this view advise the extension of facilities for hospitalizing patients. The question of the best climate and altitude for siting a central sanatorium is also disputed, the two alternatives being the Coast or the Highlands of the interior. Dr. Reidy has prepared a scheme for building a special Kikuyu village for settling chronic cases who do not require hospitalization, but who are unfit to live at home with their families. The moot point on this project is whether the settlement should be organized communally -- as the

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Staff Quarters. Some of Staff are Armed.

Emergency Treatment of Fracture.

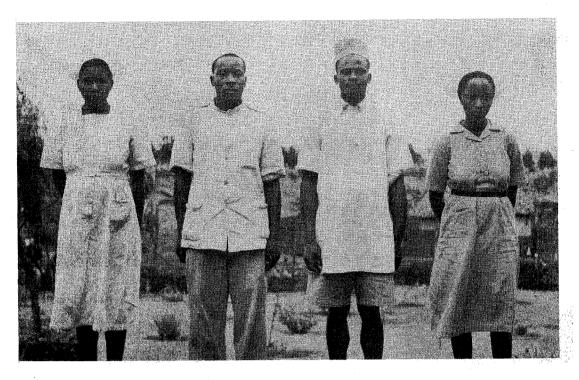
## GATUNDU HEALTH CENTER

Kiambu authorities advocate—each patient being assigned as much work as he is capable of, or whether it should follow the usual Kikuyu pattern with each man being given a shamba of his own to cultivate. Decisions will soon be made on these and many other questions concerning tuberculosis in Kenya. Professor Heaf, the authority on tuberculosis in the British Common—wealth, has come from England to head a conference at which a definite policy will be laid down for the future guidance of the Kenya Medical Department.

In order to see how medical and health problems were coped with in the more backward Locations, I accompanied Mr. Waddicar on some of his routine inspection safaris through the District. By order of the D.C. he is obliged to carry a gun himself and to have an armed askari with him on these journeys. In wooded places where ambushes were feared, we several times transferred to a police vehicle and proceeded with an escort of several riflemen. The excellent roads through the Kikuyu Reserve were almost free of traffic, except for an occasional police car. In this way I saw the working of the two Health Centers, dispensaries, schools, prisons, work camps, protected springs, and sme of the new villages. Scattered throughout Kiambu District are a number of large stone buildings, many of them unfinished, which were built by the Kikuyu Independent Schools Association and other organizations of Jomo Kenyatta. The purpose of some of these buildings is not known; they were obviously not designed as schools. all been confiscated by the government and are gradually being put to useful purposes.

Githunguri Health Center was opened in 1951. The state of emergency which was declared shortly afterwards has slightly curtailed its functions, but a second Health Center was opened at Gatundu during the height of

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Githunguri Health Center Staff: Midwife, Medical Assistant, Dresser, Health Visitor

terrorist activity. The chief purpose of Health Centers, as they are planned in Kenya, is to bring "domiciliary" medical service to rural areas. By supplying the staff with bicycles and light motorbikes, it was intended that they should serve a community for a radius of 6 or 7 miles from the Center, and for emergencies could travel 10 to 12 miles away. It was not meant to keep any beds for patients at the Center. However, the danger of attack by gangsters has considerably reduced the effective range of the staff in visiting homes, and night calls are impossible. The ultimate aim in Kiambu is to have one Health Center for every Location, and if necessary for the larger Sublocations. To observe Health Centers operating as they were planned to, the Medical Department advises a visit to Nyanza Province where some 12 or more have been opened.

When I visited Githunguri, the Health Assistant was away but the other four members of the staff were present. Laurence Mbocha, a Kikuyu himself, is in charge of the Center. Having graduated from the Medical Training School in Nairobi in 1938, served in different hospitals in the country, and taken a number of up-grading and special courses, he is now graded as a Medical Assistant which is the highest rank that an African can now reach in Kenya. Laurence is supposed to be the African equivalent of a country doctor in America or Europe. He makes three or four home calls daily and also visits the nearby work camp to take care of its sick. The rest of the time he works at the Health Center. When I first met him he was extracting a foreign body from an eye. In general he only sees patients that have been referred to him by the Dresser. This job is held by Peter Gitau who received all of his medical training in the army during the war and now holds the rank of Dresser Grade I. When patients arrive at the



Githunguri Native Court

different medicines and also gives injections and does minor surgical operations such as lancing abcesses and suturing wounds. in the army is extracting teeth. The Medical Assistant gives the anesthesia for difficult extractions.

Center they are first examined by Peter who also treats them if the case is not too difficult. Each new patient is charged a fee of 20 cents (about 3 cents U.S. money) before he will be seen. entitles him to follow-up treatment for the same disease. but if he comes with a new complaint he is again charged 20 cents. The daily sick parade, which lasts from 8 A.M. to 4 P.M., includes from 100 to 150 patients, and on market days there may be double that number. Most of these are treated by Peter who has a battery of 30 A specialty which Peter learned

The other two members of the staff are women. Anna Davita is the midwife of the Center, and does about 20 deliveries a month. This is supposed to be done entirely in homes, but because of the danger of traveling after dark, all deliveries after 4 P.M. must be brought to the Health Center where a small delivery ward has been specially prepared for emergency night work. Anna does all normal deliveries which do not require manipulation or forceps. She also repairs small lacerations of childbirth. Serious complications are taken to Kiambu Hospital by ambulance. Alice Wamboli, who holds the rank of Health Visitor, takes charge of maternity cases one week after delivery. She holds postnatal clinics at the Center twice a week, visits homes to instruct mothers in child care, and also inspects the schools in her region. Alice, like other members of the staff, travels by bicycle. Laurence Mbocha, as chief of staff, is entitled to a motorcycle, but this has been held up



Ngenda Dispensary-Midwife and Dresser

because of bureaucratic red Regulations state that he must possess a driver's license before a motorcycle can be issued, but at Githunguri Laurence will have no chance to practice in order to pass his test until he gets the machine. Mr. Waddicar is hopefully hacking away at this Gordian knot of red tape.

The Health Center is housed in a sturdy stone building near the Boma of the Githunguri D.O. A large police post is close by. The medical staff live in modern comfortable RFG - 3 - 10 -

quarters on the premises. The native court at Githunguri is situated in a natural amphitheatre in which concrete benches for spectators were built some years ago. The stage of the court is under a sacred tree which has provided shade for Kikuyu law cases for many generations. At the time of my visit a land case was being tried. The litigants followed age-old custom in holding bundles of sticks in their hands to remind themselves of important points in their arguments.

Githunguri Division is still rated as bad in regard to the attitude of the people towards Mau Mau. Outside of the government servants at the Boma, the Kikuyu in this area appear rather stolid. When we visited the colorful Githunguri market there were few smiles on the faces of the women who were buying and selling. As we left Githunguri and entered Gatundu Division, a marked change became apparent. People along the road started to smile and wave at us. The children here were particularly lively and friendly and behaved more like normal African children. The official explanation for this difference between the two Divisions is that Gatundu is now comparatively secure against night raids by Mau Mau terrorists, while Githunguri Division, which Borders on the Abedare Forest, is still vulnerable to the gangs and the people are afraid of retribution if they show sympathy with Europeans or security forces. At Gatundu Health Center, however, the staff still find it necessary to take the same precautions as at Githunguri.

Located at Ngenda midway between the Githunguri and Gatundu Health Centers, is one of the larger government dispensaries. Ngenda Dispensary, like the two Health Centers, is financed by the African District Council of the region with the aid of a large government subsidy. Dispensaries normally give only simple outpatient treatment and do not attempt domiciliary service. Ngenda Dispensary is unique in possessing a 7-bed maternity ward under the supervision of an African midwife. All serious cases which are seen at Ngenda are sent to Kiambu Hospital by an ambulance which can be sent for promptly over the radio set of the Ngenda police post.

In addition to its normal functions of caring for the sick and safeguarding public health in the District, the Kiambu Medical Department is responsible for siting and supervising the sanitary construction of various institutions which are specially built for the Mau Mau emergency. Because of the serious outbreaks of typhoid fever and other diseases in the detention camps which were built early in the emergency, the government is now giving the most careful attention to the medical and sanitary aspects of these institutions which include prisons, labor camps, special police posts, Kikuyu Guard posts, and—most important of all—Kikuyu villages, of which two kinds are being built, "permanent" and "temporary." We visited a number of these camps and villages and discussed the problems with men on the spot—the D.O.s and their staffs of special police officers and Kikuyu Guard officers. This, however, is a story which leads beyond the subject of Kiambu health problems.

Robert F. Gray