

## THE NEW PUBLIC HEALTH SERVICE IN PALESTINE.

THE first annual report of the Department of Health in Palestine for the year 1921 just issued is a record of most satisfactory beginnings.

“In theory there existed under the Ottoman code the outline of a Medical Service, which would have served the primary needs of the country if in practice it had been adopted,” but those who lived in Palestine under the Turks knew how little practice corresponded with theory.

The new department has shouldered the responsibility of conducting sanitary services throughout the land; it has established hospitals and dispensaries working in friendly co-operation with the voluntary and charitable efforts already existing; it has established a central bacteriological laboratory at Haifa and subsidiary clinical laboratories attached to the Government hospitals at Jerusalem, Gaza, Nablus and Jaffa; it has taken measures to render effectual the protection of the country from the importation of infectious diseases from sea and land. In this voluminous report of 86 pages it has furnished us with the first scientific statistics relating to the incidence of disease, to births and to deaths.

Under the Director of Health, Principal Medical Officers have been attached to each district headquarters. District offices of health, under the control of a medical officer, are now situated in each of the following towns:—Jerusalem, Ramallah, Bethlehem, Beersheba, Haifa, Akka, Shefr Amr, Nablus, Jenin, Tulkeram, Nazareth, Tiberias, Safed Beisan, Jaffa, Ramleh, Gaza, and Mejdal. Government hospitals with infectious annexes are now established at half these places and casualty posts at all but three of the remainder. Many public health laws and departmental regulations have been put forward. On the whole the report gives an encouraging picture of the co-operation of the natives of the land.

“It is a remarkable fact that a people unused for centuries to sanitary reform has grasped with such readiness the essential fact

that good sanitation means good health and health spells prosperity. Such has been our experience amongst the Arab population, who by careful and tactful dealing on the part of P.M.S. and their medical staff have responded readily to sanitary enterprize and health projects and have co-operated with the Department of Health in its campaign against dirt and disease."

In the Pasteur Institute in Jerusalem no less than 465 patients have received antirabic treatment. "The country is rich in wild fauna (jackals and hyenas particularly) among which rabies is rife. Many domestic animals—cats and dogs—are known to die of rabies and are subject to attack by wild animals." No less than 2,818 animals have been killed in 1921 in antirabic measures.

During 1921 the incidence of infectious diseases was fortunately low. No case of cholera occurred. Small-pox killed one unvaccinated child of 2, from whom unfortunately a villager inoculated several other cases, according to the traditional method of the land, producing a small epidemic.

Of Typhus 63 cases occurred, chiefly in the Jaffa district, with the surprisingly light mortality of less than 10 per cent. Relapsing Fever occurred in 51 cases in Haifa, chiefly among Egyptian labourers. 459 cases of Typhoid or Paratyphoid occurred, 66 per cent. of the cases being Jews. Scarlet Fever, Mumps, Whooping Cough, Diphtheria, Measles, Influenza, and Cerebrospinal Fever occurred in moderate numbers with a total of only about 19 notified deaths.

One of the most interesting discoveries has been that Bilharzia has become—temporarily, we hope—endemic in the Jaffa district during the war. 355 cases were found infected in 1921. Before the war the sporadic cases seen were all considered to be importations, but now it is found that in the Jaffa district 10 per cent. of the school children had acquired the disease and, most important of all, a small snail (*Isodora contorta*, genus *Bullinus*) has been found to be the intermediate host.

Lepers seem to have been greatly reduced in numbers in recent years, as it is stated there are now only 34 known lepers, of which 24 are in the Leper Hospital in Jerusalem. Probably the prolonged war caused the death or dispersal to their homes of a good many of these unfortunate victims, who before that lived chiefly on the charity of pilgrims and tourists.

The new Public Health Department cannot possibly furnish scientifically accurate vital statistics until a census of the land is taken and compulsory death and birth registration is enforced. The statistics given in the report are interesting as a promise of things to come. The statistics so far collected give the total population of Western Palestine as 744,131; the death rate 16·1; the total births for the year 20,915; the infant mortality for the year 154·8; the successful primary vaccinations 26,592 (but another 20,405 were "not observed").

"Of the eleven Government hospitals those in Jerusalem, Haifa, Jaffa, Nablus, and Ramallah were fairly well housed at the end of 1921. Of Ramleh, Tulkeram, Gaza, Akka, Hebron, and Beersheba the hospital buildings were still so entirely unsuitable, or in so ruinous a condition, and so lacking in sanitation, as to prevent the full number of patients being accommodated and to render impossible the proper isolation of infectious patients." "The appointment of British nursing sisters or matrons of the six larger hospitals has in every instance been rapidly followed by a marked improvement in the class of applicant for the posts of probationer nurse. And the grant of a nursing certificate after the three years' course of training, given in the hospitals which possess a British matron, has tended to prevent the frequent changes in the probationer nurses which formerly occurred. The provision of a proper uniform for nurses in the Government service has also had its effect in raising the standard of nursing. The nursing staff for the 372 authorised beds in the eleven Government hospitals consisted of 6 matrons, 12 staff nurses, and 61 probationer nurses. The number of admissions to the Government hospitals was 6,608, as compared with 5,768 in 1920 and 4,738 in 1919. The attendances at the Government dispensaries in 1921 was 155,523."

In the Government hospitals 10·7 per cent. of the patients were Jews, 17·7 per cent. Christians, and 71·4 per cent. Moslems. In the dispensaries 80·6 per cent. were Moslems.

The voluntary hospitals had a strength of 1,084 beds and 15,997 admissions, and here more than half the patients were Jews. The Mission hospitals at Jaffa, Hebron, and Nablus and the British Ophthalmic Hospital all, however, had a very high percentage of Moslem admissions. In the various voluntary dispensaries and clinics the attendances amounted to 657,610, of which 45·7 per cent. were for eye disease.

The nursing staffs in the voluntary hospitals amounted to 210, of whom exactly one-half were attached to the American Zionist Medical Unit. The number of pupil nurses who passed their third-year (final) examination during the year was 29, all from voluntary hospitals.

The practice of midwifery in Palestine is in a most unsatisfactory position. The 51 qualified midwives are confined to a few of the larger towns, and there are no less than 894 untrained and, in most cases, grossly ignorant women registered in the District Health Offices who practice as midwives. There are few problems more urgent than the establishment of centres for the teaching of midwifery and infant management, and as Government funds are not yet forthcoming efforts are being made to obtain voluntary subscriptions to effect this end. Of the 274 licensed medical practitioners in the land it is interesting to notice that 33, or 12 per cent., are British.

The new "School medical service" should be of great service to the country. "During 1921 there were 54 town schools with 7,069 scholars and 146 village schools with 6,499 scholars dealt with. Few of the school buildings could be considered satisfactory, but the improvements which took place during the year, particularly as regards sanitation, were very noteworthy." Trachoma is most prevalent in Southern Palestine, but the school returns show all over the land that some 74 per cent. of the school children are infected. A very special effort is being made to stamp out this disease among the young before it reaches its practically incurable stage. Daily routine treatment of infected children is being carried out under medical supervision. 15 per cent. of school children suffered from defective vision. 20 per cent. to 65 per cent. were verminous, a percentage varying in different schools. "A considerable improvement took place in this respect after the teachers had received their instructions in hygiene, and as the result of disinfection." 8 per cent. of the scholars had four or more carious teeth. Enlargement of the spleen—due to malaria—was present in 8 per cent. of the children throughout the country, but in some of the village schools in malarious districts it was as high as 60 per cent. Round worms are very common.

"Malaria stands out as by far the most important disease in Palestine; few regions of the country are actually free from it."

Anti-mosquito measures were carried out under the directions of the medical officers of health by 32 anti-malaria sub-inspectors. During 1921 a total of 66,381 possible breeding places (wells, cisterns, and cesspits) were registered. Many thousand inspections were made; some places were closed, and, if otherwise satisfactory, fitted with pumps; "oiling," to destroy the mosquito larvae, was carried out with the expenditure of 76 tons of paraffin and crude oil mixture. The results have been encouraging.

The sick have been widely treated with quinine. No less than 36,416 received regular courses of quinine from Government medical officers; in this way no less than 216,500 grammes of quinine have been distributed in the villages. In the Government laboratories no less than 25,000 blood films were examined during the year.

There was a very severe epidemic of malaria in the autumn of 1920 lasting into February, 1921. "The villages situated in the wadies, west of Hebron, running from the Beit Jebrin region to the plains of Philistia, were particularly affected. Few persons in this region escaped the disease, and around a number of villages the late crops were left standing as the people were too sick and too debilitated to gather them. The death rate in this region during the latter part of 1920 was 68 per 1,000, and the mortality was particularly high among infants and young children. In the village of Beit Jebrin itself one-sixth of the population died in three months."

Such epidemics have constantly recurred in Palestine after unusual rainfall, and the consequent development of new breeding grounds of the Anopheles. A severe epidemic of this nature accompanied by cases of "Black Water Fever" occurred in 1893 in Jaffa.

The drainage of swamps is an essential part of any antimalarial campaign. A successful scheme of this nature has been carried out at Beisan resulting in the drying up of some thousand acres of rich government land, now ready for cotton growing, to the conserving of water for personal irrigation on a large scale and to a reduction of malaria in this notably malarious district. A similar smaller scheme has been successfully carried through in Jenin.

A Central Advisory Commission has been appointed by the High Commissioner to guide and advise the Government and to educate public opinion with regard to malaria.

With respect to water supply the report has some interesting

remarks. While the standard of purity is "admittedly low as compared with British municipal standards, it has proved satisfactory in practice, and the enforcement of a higher standard at present is impossible, as it would lead to the closure of the majority of the wells and cisterns in the country."

"Piped town supplies exist in Jerusalem, Tel Aviv, Gaza, Beersheba, Hebron, Ramleh, Tulkeram, Jericho, Nablus, Akka, Tiberias and Safed. In all cases they are inadequate, incomplete and unsatisfactory. The Jerusalem supply, installed by the Army in 1918, is by far the best, but house connections for the poorer inhabitants are impossible on account of the prohibitive cost of the water (£18 per annum), and in any case a supply of less than 150,000 gallons daily for a city of over 60,000 inhabitants allows only of street standard pipes and a few connections to hospitals, orphanages and similar institutions and to the more wealthy houses. It is expected that the Jerusalem supply will be more than doubled by next year. Purification of the water, as elsewhere in Palestine, is effected by means of bleaching powder. The bulk of the Jerusalem drinking water, however, still comes from its 6,600 privately owned rain-water cisterns."

At Tiberias people mostly obtain their water by pitchers which they fill by wading into the lake, but work has actually started whereby a sufficient supply will be drawn from an unpolluted part of the lake, north of the town, and proper facilities for purification will be provided.

The antiquated and ill administered Quarantine regulations of the old Turkish Government have now been replaced by more efficient and more humane methods.

"At the present time the control of travellers arriving by land or sea consists in an observation of the health of all arrivals for the first five days of their sojourn in the country. Detention of travellers is not resorted to except in the case of those who arrive by sea from infected ports. With the development of the system of observation at their destination it was possible, at the end of the year, to restrict detention to those categories of travellers from infected countries most likely to convey infection and most difficult to trace at their destination."

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