

Indian Medical Gazette.

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THE NEW ANTIPLAGUE CAMPAIGN.

THE publication in the *Gazette of India* of the gracious letter from the King-Emperor and of one from His Excellency the Viceroy together with the letter from the Home Secretary to all Local Governments and Administrations marks another departure in the plague policy of the Government of India.

For a dozen years past the policy of the Government of India as regards plague has been the butt for a vast amount of irresponsible criticism, both in India and in England, in the latter country especially at the hands of critics whose advice has not always been taken at their own valuation of it.

In a country like India a fell epidemic like plague cannot be considered only from the point of view of pure science, and in a country which contains an enormous number of people still ignorant, superstitious and gullable, ready to listen to the wildest and most absurd rumours put forward by interested or mischievous persons,* it behoves, nay it is the duty, of such a Government to go warily and to be sure that the measures proposed for the prevention of the epidemic are not calculated to defeat themselves

* After we had written the above we came across the following remarks in the *Lancet*, p. 476, of August 17th, in a sensible and practical letter by Dr. A. Elliot, of London, who has had much practical knowledge of plague in Southern India—"Anyone who has the smallest knowledge of Indian life knows the innumerable obstacles that rise up to baffle your efforts in every direction. Eliminate Bombay, Calcutta, Madras, and at most three or four other large cities in India, and what do you find? Millions of people, uneducated, bound down by caste rules, living on superstition, ready to believe the word of anyone so long as it contains the slightest trace of the supernatural. People whose customs of to-day have come down to them since India was. People who see in every passing cloud the finger of some irate god. Go back to the cities that have been eliminated. You will find three-fourths of the native population still hugging the superstitions of their forefathers, still anxious to be left alone with their troubles. And what of the educated fourth? In the majority of these educated minds there still lurks the shadow of superstition, and the man with the university degree will, when his child yawns, crack his finger-joints so as to frighten away any evil spirit that may be hovering round ready to find a lodging in his child's inside. In the face of all this the task seems hopeless.

"There is another element, and this of a more serious nature, that has to be contended against. Many of these educated persons use their higher intellectual powers not for the general good but for their own individual advancement. They do not scruple to make use of the superstition and ignorance that surround them on all sides."

by being in advance of, and opposed to the ingrained feelings, or prejudices of the peoples of the country.

It is very easy for arm-chair critics in London to write voluminous lectures and letters pointing out the obvious, on *à priori* principles, but any attempt to deal successfully with such a disease as plague must be founded, first, on accurate knowledge, and secondly, must not be too violently or obviously in opposition to the feelings of the people for whose benefit the measures are intended. Theoretical critics and learned bodies at home may point and even point truly to this and to that as a remedy but the fundamental fact remains that unless what are called "plague measures" carry the people with them, and unless they are supported by the people themselves, they are doomed to, at the best, a very partial success only.

It cannot be denied that when plague first appeared in Bombay in the hot weather of 1896 it was a disease unknown to the existing generation of medical men. It had existed for some time previously in Hong-Kong, and but little attention was paid to it, and the medical press in England and the Continent entirely failed to recognize the terrible importance of the China epidemic. It was not till the pest appeared in Bombay, and the matter was seriously taken up by the various Local Governments in India that the world at large realized the danger which lay before them.

Those who remember that summer of 1896 will remember the difficulty of finding any information about the disease. In India all we could refer to was an article by Col. Hutchinson (then I. G. of Civil Hospitals, U. P.) on the *Mahamari* or endemic plague of Garhwal and Kumaon and a lecture by the *late* Surgn.-Genl. Harvey on "Plague; a disease of olden times." Ordinary text-books were even more useless. All Europe believed that the day of plague was past, and it excited less interest than does either typhus (another disease now little seen) or the sweating sickness at the present time.* The first measures taken by the Government of India were, therefore, based upon the knowledge then available, and if they failed, it was because

* If an outbreak of *typhus* occurred in Europe at the present moment, would we find it now any better prepared in knowledge than India was as regards plague in 1896? Very little is yet known of the real etiology of typhus and it is probable that the old theories would be found wanting. So, far the germ and its possible carrier, a tick, are only guessed at.

nothing was then known of this old-world and half-forgotten disease. Hence the vogue of sanitary cordons, railway examinations of passengers, and disinfection of floors, &c., &c. Since those days our knowledge has largely widened till it seems as if we were on sure ground, and this had been effected by the devoted labours of a very large number of medical officers in India and their confrères in other countries threatened or affected by the pandemic.

For centuries the connection between the rat and plague has been traditionally known, but it is only within the past few years that the connection between rat-plague and human-plague has been scientifically established. The next great step forward in our knowledge of the etiology of the disease was due to the scientific imagination of Capt. W. Glen Liston, when he gave considerable evidence to show the important factor the rat-flea was in the spread of the disease. The appointment by Lord Curzon of the recent Plague Advisory Committee had led to a vast amount of good work done in the Bombay Laboratory and elsewhere by Major Lamb, Capt. Liston, Dr. Martin and their able assistants, and now we are presented with a tangible and practical theory on which to work.

The following are, in the words of the Home Secretary to the Government of India, "the outstanding conclusions" on which measures must be taken, *viz.* :—

- (1) "That bubonic plague is spread by infected rats ;
- (2) That the vehicle of contagion between rat and rat and between rat and man is the rat-flea ; and
- (3) That the life of the plague germ in soil, the floors and walls of houses and the like is of short duration."

Efforts, therefore, need no longer be directed to "troublesome and expensive measures" directed towards disinfection of soil and houses, but efforts must be concentrated on the prevention of the access to man of infected rats and their fleas and to counteract the effects of the bites of infected fleas.

Success in the future will depend upon the degree which it will be found possible to bring "the wishes and even the prejudices of the people" into line with these necessary steps.

In an article in this issue Lieutenant-Colonel Andrew Buchanan, I.M.S., pleads hard and well

for a trial of that natural enemy of the rat the cat, and from his experience in the Central Provinces it is clear that this is a "plague measure" acceptable to and understood of the people, and we ask therefore for a thorough trial of cats as plague preventers in addition to all other measures directed against rats and rat-fleas.

It must before all be remembered, however, that it is *not during the plague epidemic* that we can war successfully against rats ; they must be exterminated *before* the advent of the disease, and the custom of deputing plague medical officers only during the epidemic season should give way to the employment of tactful and experienced officers throughout the whole year.

THERE REMAINS, HOWEVER, INOCULATION.

"*Inoculation*" (as Sir Harold Stewart says, in the letter we have already quoted from) "*is established beyond doubt (as) a most valuable protective against plague.*"

We do not suppose there is a single medical man with experience of inoculation who will not endorse this statement, and if there are any sceptics remaining we need only refer them to the recently published report by Lieutenant-Colonel Bannerman, I.M.S., the Director of the Bombay Laboratory. In this report (for nine months ending 31st December 1906) will be found a mass of evidence proving, to our mind conclusively the enormous protective power of inoculation and its entire harmlessness. This is shown by the numerous experiences by medical men and others which are quoted in Lieutenant-Colonel Bannerman's report.*

The future of plague in India may be summed up in the statement that it depends entirely upon the degree with which the peoples of the affected provinces in India can be persuaded and helped to undertake for themselves the destruction of rats and rat-fleas and the rendering of their habitations unfit abodes for such vermin, and, moreover, the degree with which they can be taught to protect themselves, in the meantime and during the long months of danger, by inoculation, which affords a very high degree of immunity and doubles the chances of recovery even if attacked.

* Since the above was written we have read with great interest the powerful memorandum on the great value of inoculation as proved in the United Provinces. The Government of the United Provinces is to be congratulated on the scheme they have formulated for the control of plague. We hope soon to see the other provinces (such as have not yet begun) follow suit.