

Dr. Manson also described some experiments with these drugs but his work is not sufficiently advanced to allow him to express an opinion.

Both Drs. Fraser and Manson after giving anti-dysentery bacteriophage an extensive trial are very definitely of the opinion that it is valueless in treatment.

## Correspondence

### ASSOCIATION OF MEDICAL WOMEN IN INDIA

To the Editor, THE INDIAN MEDICAL GAZETTE

SIR,—The undernoted resolution was passed at a meeting of the Northern Division of the Association of Medical Women in India, and later was adopted by the Council of the Association.

'In the opinion of this meeting the time has come for reconsidering the allotment of Medical Women for work in India. The efficiency of the work would be enormously increased if there were groups of medical women working together, each being a specialist in her own subject, e.g., surgery, medicine, gynaecology and obstetrics, and pathology. In this way there would be centres of highly organized work in large cities where (a) surrounding dispensaries could refer their more serious cases for treatment; and (b) post-graduate work could also be carried on. These centres might employ honorary workers in addition to the paid staff of specialists'. The reasons given in the discussions which led to the resolution were as follows:—

Medical work in most hospitals in India at the present time is not up to the same standard as in Europe. The reason for this is partly that medical officers have no time to carry on careful and detailed clinical and pathological examinations, and partly that medicine has now become so highly specialized that one or two doctors cannot hope to be experts in all departments. Under the present system where one medical woman is in charge of a small hospital with one qualified assistant, or even where two medical women are in charge of a larger hospital with two or more assistants, it is impossible to keep pace with the many new methods both for diagnosis and treatment. We lose many opportunities of successful treatment, and each time we lose the confidence of a patient. In some towns there are two or three hospitals, each of which may be poorly equipped and all of which are poorly staffed according to modern ideas. These hospitals have done excellent pioneer work and have gained the confidence of the public, but no one knows better than the doctors in charge that very much better work might be done, and very much greater success attained, if the doctor had more leisure for thought and study, and especially if they were able to concentrate on one department of the work and refer other cases to colleagues specially trained to receive them. The need being so clear we feel the time has come to put the matter forward, and to try for a complete reorganization of medical relief in India, or at least in the smaller towns and districts, for the system we are advocating exists to some extent in the larger towns and teaching institutions.

No doubt there would be difficulty at the present time in getting additional expenditure met, but would it not be possible for different charitable organizations to close down neighbouring institutions, and pool all their resources on one institution organized in the manner indicated above. A chain of dispensaries through the surrounding district would keep in touch with the hospital. In the end more good would be done even if a smaller number of in-patients were treated.

Although our discussion related chiefly to women's hospitals, there is no doubt that similar reorganization is equally needed for men's hospitals.

Yours, etc.,  
RUTH YOUNG,  
President.

### VACCINATION AGAINST SMALLPOX

To the Editor, THE INDIAN MEDICAL GAZETTE

SIR,—On p. 242 of your issue of April 1933 appears a letter regarding 'Vaccination against Smallpox', with a note in reply thereto by Lieutenant-Colonel A. D. Stewart, I.M.S., to which I should like to add one or two comments.

Firstly, is it not possible that, when a tube of lymph is assessed as sufficient for 4 persons, the manufacturers have gauged the amount necessary for use by the clumsiest vaccinator with the worst technique?

Secondly, I would make a plea in favour of more attention being paid to the finer points of vaccination technique at schools of instruction. With ample opportunity for noting methods and results of vaccinations done in different parts of India, we have found them to vary in appearance from pin-pricks to attempted amputations, and we have also been struck by the diverse methods employed. The object of vaccination is to split the epidermis and to inoculate the virus no deeper than the region of the stratum granulosum and stratum Malpighii.

In some parts of India vaccinators scarify the arm, and then when it is nice and bloody they mop on the lymph through the oozing mess; the result, apart from possible sepsis, is that nothing happens, for the lymph is either washed away in the gory stream or so diluted as to be ineffectual. For this reason I object to the circular drill seemingly approved in the last paragraph of Colonel Stewart's note.

In highly skilled hands the drill may possibly be successful, but I submit that it can never be as good as a cutting edge or point. For manufacturing reasons the edge of the drill must be relatively broad so that on circular scarification a ditch is produced rather than a split, and, whereas the latter, on swelling, closes over the inoculated virus, the former in comparison is flushed by oozing serum from the bottom and sides, and the virus stands relatively less chance of establishing itself.

The truth of this assertion has frequently been suggested by the success of lancet-scarification after drill-vaccination has failed.

Dr. A. E. Cope, of Westminster Hospital, used to teach that a good vaccination should after a minute or two show only the minutest blood speckling along the lines of scarification and that no drop of blood should flow.

A few years ago an overseas port was infected with smallpox, and vaccination with drills produced a regrettable number of failures. The drills were scrapped, lancets imported, and demonstrations in technique given to the specially enrolled vaccination staff who were taught to put three small beads of lymph, each about the size of millet seed, spaced vertically upon the cleansed skin, and to vaccinate through these with only 3 or 4 vertical parallel scarifications each about  $\frac{1}{4}$  inch long. The result was a most satisfactory crop of successes, practically no sepsis, phenomenal popularity of vaccination inasmuch that some who applied for vaccination were found to have been done already on the other arm or leg (presumably vaccination certificates were proving to be of marketable value), and cessation of the epidemic, if I remember aright, within about 6 weeks.

It is true that, in a population of about 58,000, about 78,000 vaccinations were performed which suggested that both the population and the vaccinators meant to do the thing properly, but I still maintain that it was the latter's technique to which the success was due; it was found that, with a tube estimated by the manufacturers as sufficient for 10 persons, between 30 to 42 persons could be satisfactorily vaccinated, according to the lightness of touch of the vaccinators of whom, strangely enough, a Somali girl proved to be the best.

Yours, etc.,  
C. L. B.

BOMBAY,  
26th April, 1933.