## WHY ARE MODERN INFECTIOUS DISEASES MILD?

H. W. Hill, M. B., M. D., D. P. H.

Director Institute of Public Health, London, Ont.

WESTERN UNIVERSITY
MALE OAL SCHOOL

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To offer an hypothesis explaining a phenomenon before being sure that the phenomenon exists is perhaps more a relaxation than a contribution to serious discussion.

Let me say that in offering an hypothesis to account for the relative mildness of modern smallpox, modern scarlet fever, etc., as compared with ancient, I feel that I am handicapped by lack of proof that they are relatively milder; and, instead of proof, I must offer the widespread but indefinite "general impressions" of a great many of the older physicians; the descriptions of these diseases as given by many of the older writers; and the statistically derived but only subconsciously credible apparent falling off in the mortality rates.

Against each of these sources of belief stands one or more possible fallacies. The decrease in the severity of disease as it presents itself to the old physician, looking backward, may be no more than an illusion, due to the greater impression made on his mind as a young man just setting out to establish his practice, by the cases he saw then, as compared with the smaller impression quite similar cases may make on him now; or it may be due to the fact that a physician is apt to judge by end results; and because modern treatment saves patients that would have died years ago, it seems to him to mean decrease in the severity of the disease, although it means only an increase in the potency of the treatment.

The descriptions of the older writers must be discounted also, for we all know that it is not very long since only severe forms of disease were recognized—since patients were hardly considered as sick unless they were nearly dead. It is easily within the memory of all of us that mild diphtheria, mild scarlet fever, etc., were looked on as innovations, hardly worth serious study, dreams of the faddists. Naturally all the old writers discussed and emphasized the severe typical cases—and naturally the impression arises that only such cases existed.

The comparison of older statistics with those of today to determine the relative deaths against relative populations would be of considerable moment had we any reason for confidence in either the figures for deaths or the figures for populations.