

We know that both of these essentials are far from reliable now—we guess on good grounds that they were far worse fifty years ago. As for relative deaths to relative cases, we do not dream that these are any where nearly accurate now—and they certainly were not then.

Notwithstanding all this lack of definite proof I assume that the widespread impression of relative mildness today does correspond with the facts, in smallpox, diphtheria, and perhaps in tuberculosis, at least; although my own tentative belief embraces also most of the other specific non-venereal infections.

At all events, explanations are often offered for this alleged present-day mildness. Perhaps the most often offered is the most fallacious of all. This is the explanation which attributes the mildness to a gradually accumulating inherited immunity, affecting the race as a whole.

The fallacy lies here: admitting for argument's sake, that immunity might be acquired by the race as proposed, how long has the race been acquiring it? This immunity has shown its effects only in the last 100 years—or 50, or 30, depending on the authority and the disease. But the human race has existed 6,000 years (more likely 100,000). The human race has suffered these diseases 6,000 years (more likely 100,000). What sort of gradually acquired inherited racial immunity would that be which showed no effect for 180 generations (more likely 3,000) and then sprang up fully armed in the last two or three?

Sometimes the explanation (of mild smallpox at least) is based on gradually acquired inherited immunity from artificial vaccination. That explanation has the merit—a limited merit it is true—that it does take into account the recent development of the mildness, although only for the one disease, smallpox. But this has its fallacies also. First, the mildness of present-day smallpox does not seem to have developed gradually since vaccination first came into use. It seems to be confined to the last twenty or thirty years, or even less. Second, the present mild smallpox is not confined to the much vaccinated races, but flourishes everywhere. Last, and most important of all, how is it possible to consistently conceive the development in one hundred years of inherited immunization from cowpox, which itself protects the vaccinated only five years, when the virile and life-long protection afforded by virulent smallpox had operated in the race for thousands of years without any such effect at all?

The second most commonly offered explanation of the present day mildness of the infectious diseases is "improvement in general sanitation." Here again we have no human statistics which are conclusive. If we may judge from the testimony of careful breeders of prize stock, however, the tendency of hygienic surroundings is to make animals more susceptible to infections rather than less—and it certainly does not become us at this stage to claim that the race now crowding into cities and living in