EDITORIAL

SMALLPOX AND ERADICATION?

There is no need to doubt that, among the noteworthy events of this century, that constituted by the eradication of smallpox, that "most terrible scourge of mankind" as it is described in Fenner's report (1984), figures prominently. With the achievement of the proposed aim, after the putting into effect of a notable campaign, the result was officially recognised by the World Health Assembly in May, 1980. After five years, during which vaccination has not only ceased to be obligatory but has also come to be regarded as emphatically inadvisable, reflection on the subject, and especially on what one understands by eradication as an aim to be pursued in Public Health, is opportune. Eradicate, "up-root", means no less, in fact, than "remove entirely", which implies as its final result the impossible further existence of that which existed or might exist. In the above mentioned example, that of smallpox, we have the only threat to human health which has, to date, been, at least in theory, eradicated at world-level.

We may agree that, in speaking of infections, eradication has the meaning of the contrived extinction of at least one of the populations involved, preferably of course that of the infecting agent. In the case in question, the result attained means that the smallpox virus ceased to be part of our biosphere, like other species which have been extinguished as a result of human activity. In face of this, there arise some questions which must be taken into consideration and which serve as guides to subsequent surveillance. If, as is agreed, the agent no longer exists in the natural environment, one is obliged to examine those reasons, of social and political nature, which might have contributed to the fact of the same thing's not having happened with regard to the human environment. It is evidently true that the first premise, always held as incontestable truth, has never been proven. And it is doubtful whether it ever will be proved, seeing that diverse animal poxviruses may exist, which, at least theoretically, could become candidates to the niche supposelly left vacant by that one which had adapted to the human organism. We do not, however, intend to dedicate these lines to that point, already debated by Candeias (1980) in this same periodical. Let us admit, then, the inexistence of the smallpox virus in nature, at least in so far as it is detectable. However, the same cannot be so categorically stated with regard to the man-made environment.

It is known that for reasons of a technical and (why should we not say?) a political character, the virus is being maintained in some laboratories specially designed for the purpose. On the other side, some curious aspects of this question emerge. Thus, the possibility of risk to archaeologists is raised — as also to people in general who, by reason of their professional activities, find themselves obliged to handle the mortal remains of victims of the disease, in which the agent could remain viable for a considerable period of time (Meers, 1985). Some go so far as to argue, on the basis of the report of possible lesions on the mummy of the pharoah Rameses V, in favor of the advisability, at least for the time being, of those being involved in excavations undergoing preventive vaccination (Zuckerman, 1984). But what is more worrying is the fact that the recommended suspension of the application of anti-smallpox vaccine is not being uniformly applied by the member States of the World Health

Organization. This is particularly true with respect to military personnel. According to a recent report, a specially appointed Committee related that only eight contries have accepted the recommendation and announced their interruption of the vaccination of their armed forces. It is scarcely necessary to say that neither of the presentday super-power appears in this list (WHO, 1984). For this reason, the Committee had no choice but to recommend that recently-vaccinated recruits should be isolated and, for at least two weeks, confined to their bases. In this way the Committee hope to eliminate the possibility of their contact with people who have not been vaccinated and thus diminish the risk of the propagation of the vaccine virus. As one can see, it has to be admitted that, despite the supposed eradication, the potential presence of smallpox cannot be ignored.

Such aspects of the issue, which one can observe at the present time after a world-campaign of eradication, lead inevitably to certain considerations which arise from the experience. One has succeeded in eradicating a disease, in this case smallpox, but not the infectious agent. And, in this particular example, for no other reasons than those arising from human behavior itself. This latter, be it said, permeated with inconsistencies. It is argued that the politics of eradication were justified in face of the expense involved by the need for measures for the quarantine and vaccination of travellers. However, it is difficult to imagine that these expenses could be greater than the ever-increasing expenditure on armaments and the maintenance of powerful armies! It is to be believed that, at least theoretically, there would be a much better basis for eradicating the threats arising from human behavior itself, than those which arise from the presence of other populations in our biosphere. What greater absurdity could there be, having freed humanity from the "threat" of smallpox, than our having to face the threat of the "atomic winter"? So great is this threat, that the National Academy of Science of the USA is carrying out research with a view to estimating the risk consequent on the detonation of 25,000 atomic bombs of 6,500 megatons of explosive power (Kerr, 1985). These are the threats with could really be eradicated — and with much better theoretical chances of success. One cannot help confessing, in sound judgment, that it is the aggressions against health which arise from man himself which ought to be considered deserving of priority in our plans for eradication. The list is a long one. One may include in it morbidity and mortality caused by violence, by the use of drugs and tobacco, by the social ratrace, by hunger, by the abandonment of children, by illiteracy, and the consumption-mania, by the deterioration of values and self-respect, by the destruction of the environment, and many others.

To think of eradication when one has public health problems caused by infectious diseases in mind imposes on us the need to take into account not only human behavior, but also that of the other populations involved. These latter will certainly set about assuring their own survival, and, unless the present writer be very much mistaken, it would be better to coexist peacefully with them rather than to annihilate them. The example of poliomyelitis is highly suggestive, as one has reached the happy position in which the human population is able to live at peace with certain virus populations which have been adequately domesticated.

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This article has received corrections in agreement with the ERRATUM published in Volume 9 Number 6.