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IMPORTATION OF SMALLPOX CASES INTO NEPAL

by

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Nepal is a land-locked country sandwiched between India on the south and China on the north. The border between Nepal and China is formed by the high Himalayan mountain range, and adjoining areas are sparsely populated. The border crossing is strictly controlled and infrequently used, so that transportation of smallpox across this border does not pose a problem.

On the other side, there is no natural boundary between Nepal and India. In the adjoining areas is an extensive plain (called Terai) which is thickly populated. People cross the border in either direction very frequently and are unrestricted in doing so. People on both sides of the border belong to the same ethnic group and many have relations and properties on both sides. In addition, a large number of Indian labourers come to the Terai during the season of cultivation and harvesting and there are many Hindu holy shrines which a large number of Indian pilgrims visit every year, particularly during special religious periods.

It is obvious that smallpox can be easily imported into Nepal from India. In the absence of inspection at the border, the probability of importation becomes even greater and, of course, the Indian states bordering Nepal are known to be endemic for smallpox.

Cases of smallpox in Nepal have been restricted to the border districts of the Terai. All but one case during the last 3 years have occurred in the Terai area. In fact, during 1970, reported cases have been found only in one district in the Terai. Transmission of smallpox from India to Nepal has been occurring and we have traced the sources of infection to India in a few outbreaks. We have no information regarding transmission in the other direction.

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In an outbreak in Belwa, Parsa district, the source of infection was traced to a village near Sugauli in Bihar, India, where a housewife from Parsa along with her children had visited her parents and where there were many cases of smallpox. A few days after her return, one of her children became ill on 7 April 1969. The disease spread to other members of the household and to 10 other houses in the village, resulting in 21 cases and 7 deaths. All the patients were Muslims and none had been vaccinated because of religious beliefs.

A similar outbreak occurred in the district of Rauthat. It began on 21 January 1969 with an 8-year old boy who had returned home after a visit to his uncle's house in India 2 weeks earlier. There were altogether 11 cases with 3 deaths in 6 houses. None of the cases had been vaccinated previously.

In another outbreak in Morang district, there were 3 cases who had never been vaccinated and all of them died. All cases were in the same family. The first case occurred on 26 January 1969, the second on 7 February and the third on 24 February. On 14 January the first case had visited a relative in Forbesganj, India, who died of smallpox on that day.

The source of infection in the outbreaks of Kapilvastu district was a smallpox patient who was visited in Gonda district, India, by her father and brother in May 1969. After their return to Kapilvastu where the father worked in a flour mill, the boy became ill with the disease. Some of the people from other villages who visited the flour mill contracted the disease which later spread to neighbouring villages. In all 133 cases including 21 deaths were reported of which 126 had not been vaccinated. The last reported cases occurred in July 1970.

To tackle this problem of transmission of smallpox across the border, close cooperation and coordination among the concerned officials are required. Priority has to be given to vaccination coverage of the border areas to achieve the maximum possible level of immunity. There should be a mechanism for immediate reporting of outbreaks to a counterpart in the other country so that necessary measures could be taken on both sides of the border. All relevant information about the outbreak such as the source of infection, chain of transmission, contacts, etc. should be exchanged and necessary help and cooperation should be provided without any delay. This can be best achieved at the local level.

We suggest that regular meetings be held at local and at highest levels to discuss the problems and to recommend as well as to implement the remedial measures. We feel that with close cooperation and with active execution of the programme, the problem of the transmission of the disease across the border can be solved to mutual benefit.