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DEVELOPMENT OF REPORTING SYSTEM IN NEPAL

by

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Nepal is administratively divided into 75 districts grouped into 14 zones. Each district has a certain number of panchayats varying with the size of the population in the district. The panchayat is the lowest unit of the administrative system and has a population of about 2 500. The total population of Nepal according to 1971 census is 11.3 millions. The Nepalese fiscal year commences on 16 July.

The Smallpox Eradication Programme (SEP) commenced in Nepal in 1967 in some districts and each year more districts were included in the programme (Table 1).

TABLE 1
Number of districts included in the programme

<u>Fiscal year</u>	<u>No. of districts</u>	<u>Cumulative total</u>
1967-68	15	15
1968-69	14	29
1969-70	12	41
1970-71	9	50
1971-72	8	58
1972-73	17	75

The programme in the last 17 districts will function effectively from December 1972 only.

Nepal has a very poorly developed transport and communications system. Therefore, in certain districts, messages sent from an affected village by any mode may take as long as a week or more to reach the district headquarters. Reports sent by post from certain district headquarters may take about a month to reach the national headquarters, the average for all the districts being about 2 weeks. Delays in receiving the reports are inevitable.

The health facilities available in most of the districts are still very poor and the number of institutions providing such care is also very low.

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District health offices have not yet been established and except for the services rendered by a few special projects like SEP, Malaria Eradication Project, the available facilities are limited to the provision of available care to sick patients who come to the clinic for treatment. The smallpox patients usually do not seek medical help. Under such circumstances, the health institutions do not play any significant role in the reporting of smallpox cases. There is also a tendency, in certain areas, to hide smallpox cases. People not only refrain from reporting cases but often also refuse to cooperate in the surveillance and containment measures taken by the SEP staff.

The SEP had to develop its own reporting system from its own staff in the district. The district staff includes one district supervisor, one assistant supervisor and senior vaccinators whose number varies from 4 to 8 depending on the population of the district. There is also a zonal supervisor who supervises the programme in the districts of the zone.

Reporting System prior to July 1970

Stress was put mainly on mass vaccination and little attention was paid to surveillance and reporting. There was no prompt and energetic investigation of outbreaks in the districts. The reporting of smallpox cases was incomplete and delayed. There was a considerable time lag between the beginning of the outbreak and the date of reporting. Reports were generally received from district SEP offices, thus only from the districts where SEP was in operation. Only when the outbreak built up to a sizeable number of cases did the local authorities decide to report. Occasionally, information was received by the SEP through the press media.

Reporting System during the fiscal year 1970-71

Stress at this time was placed on immediate investigation of all reports of suspect cases and on effective containment action by the district SEP staff. However, there was no active surveillance system and reports of suspect cases had to come from the affected panchayat to the SEP office. Reports of suspect cases were generally not received from the districts in which the SEP was not in operation.

The district SEP staff promptly investigated the reports, carried out epidemiological investigations and took containment measures. Telegraphic information about the confirmed outbreak was sent promptly to national and zonal SEP Hqs. Generally the national and zonal SEP staff (including WHO) proceeded to the outbreak area and guided the district staff in organizing the containment of the outbreak.

Four containment teams were trained and posted at different locations during this period. Due to certain financial and administrative problems, these teams did not function effectively and in time became non-operational due to resignations etc.

The smallpox outbreaks during this period occurred mainly in the Terai districts bordering India. The reports of the outbreaks were received from persons in the affected panchayats by the district SEP offices. The interval between the date of onset of rash in the first case and the date of reporting to district SEP offices was generally 8 to 10 weeks (Table 2). There was no delay in the telegraphic reports from the district SEP office to national SEP Hq.

TABLE 2
Smallpox outbreaks during the year July 1970-July 1971

<u>District</u>	<u>Panchayat</u>	<u>No. of cases</u>	<u>Date of onset of rash in first case</u>	<u>Date of report to District SEP office</u>
Sarlahi	Karmaiya	24	26 Jan.	18 March
Mahottari	Simaradahi	14	22 Feb.	12 May
Rauthat	Barangoon	9	13 March	9 June
Sarlahi	Giriya Saharwa	8	15 March	5 May
Dailekh	Siga Sain	18	18 March	16 May
Mahottari	Sanukhara	22	23 March	2 May
Sarlahi	Hariwan	12	15 April	14 June
Rauhat	Bahadarpur	8	2 May	30 May
Rupandehi	Butwal	4	6 May	2 June
Mahottari	Saharwa	5	12 May	12 June
Sarlahi	Musaili	1	12 June	26 June

Reporting system since July 1971

It was felt that the time lag between the onset of first case and date of reporting should be minimised and cooperation of the panchayat leaders should be obtained for prompt reporting of all suspect cases.

In order to achieve this, stress was laid on surveillance and active search for cases by all district SEP personnel including senior vaccinators. The vaccination programme was limited to four winter months. Temporary vaccinators were recruited locally from each panchayat for a period of one month. Temporary vaccinators visited all houses and carried out vaccinations with stress on primary vaccinations and also carried out active search for suspect cases. During this period, the senior vaccinators supervised the temporary vaccinators.

During the rest of the year, each senior vaccinator was assigned a certain number of panchayats in the district. He should visit each and every panchayat assigned to him at least once a month in the Terai or once in 2 months in the hills, on an approved field programme.

When the senior vaccinator visits a panchayat, he makes enquires of suspect cases of rash with fever from the Pradhan Panch, other panchayat leaders, school teachers if any, health institutions if any, and malaria units if any. He also visits other places and people from whom information may be available and also looks for cases in as many houses as possible. He seeks the cooperation of panchayat leaders for prompt reporting of suspect

cases to district SEP office. All reports of suspect cases are immediately investigated by the district supervisor.

In order to lay emphasis on the new approach, a new training manual was prepared and distributed. Refresher training courses were held for zonal senior supervisors at the national Hq and for assistant supervisors and senior vaccinators at zonal Hq.

In addition to immediate telegraphic reports of all smallpox cases, a monthly reporting system was developed in which particulars of all reports of suspect cases were sent by district SEP offices. During the fiscal year 1971-72, altogether 486 such reports were investigated by district SEP staff and were found to be mostly chickenpox or measles.

The importance of district SEP office in the complete reporting of smallpox cases was demonstrated in Kailali district (Seti Zone) in Western Nepal. This district was included in the eradication programme during the fiscal year commencing July 1971. The SEP office was established in December 1971. As soon as the SEP office was established, reports of suspect cases came from panchayats as well as malaria units. Investigations by the district supervisor and the zonal senior supervisor revealed major endemic foci in this district. Sixteen out of 44 panchayats in Kailali districts were affected. During 1972 only Seti and Bheri zones in Western Nepal were affected. In the affected districts of these zones where the active search for cases had already been instituted, it was found that the time lag between the date of onset of the first case and date of reporting to district SEP office was approximately four weeks (Table 3).

TABLE 3
Smallpox outbreaks in 1972, except in Kailali

<u>District</u>	<u>Panchayat</u>	<u>No. of cases</u>	<u>Date of onset of rash in first case</u>	<u>Date of report to District SEP office</u>
Bardia	Bhimapur	17	24 Jan.	17 Feb.
"	Dhaulapur	10	19 Feb.	26 Feb.
"	Mohmadpur	1	28 Feb.	29 Feb.
"	Rajapur	3	16 April	24 April
"	Patabar	1	30 April	30 April
"	Patna	10	26 May	22 June
Doti	Mannakapuri	10	2 April	10 April
Banke	Sargoun	14	21 March	25 April

Routine weekly reports

SEP national Hq sends routine weekly reports to WHO Hq, Geneva.

From July 1972, a weekly reporting system (by post) of smallpox cases has been instituted at the district level. This is in addition to the immediate telegraphic reporting of all smallpox outbreaks and cases. The weekly reports (including "nil" reports) are sent by district SEP offices. Weekly reports are now being received regularly from many districts and it is expected that by the end of this year all district SEP offices will be sending the weekly reports regularly. The time lag of the receipt of weekly reports from remote hilly districts would be long. However, in the case of smallpox outbreaks, prompt telegraphic reports would be received.

Surveillance teams

The previously established containment teams have been abolished and in their place 4 surveillance teams based at Kathmandu were formed in September 1972. These teams will not face the previous financial and administrative problems. The main function of these teams will be to improve and strengthen the surveillance activities of the districts. These teams will also be sent to the outbreak areas as soon as the reports are received by the national Hq and will help the district staff in epidemiological investigations and containment action.