



INTER-COUNTRY SEMINAR ON  
SURVEILLANCE IN SMALLPOX ERADICATION

INDEXED

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'ENCOURAGE AND APPRECIATE IMMEDIATE REPORTING OF SMALLPOX'  
METHODS TO DETERMINE THE EFFICACY OF THE PROGRAMME

by

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The efficacy of the smallpox programme depends first and foremost upon the sincerity and honesty of the workers. It is therefore essential that the right type of workers be selected. To enable the workers to maintain their sincerity and honesty, we must pay their salary and travelling allowances in time. We must supervise their work in the field, guide them in the field and review their field work at least once a month. We should understand their difficulties and solve them. We must also appreciate good work and criticize bad work. No bad worker should be allowed to continue in the programme if he does not improve in spite of guidance and warnings.

It is very important that workers develop a proper approach. The methods of approach will vary according to the attitude of the local population. Workers should therefore be given periodical guidance to develop proper methods of approach.

When the workers are honest and sincere and have learned the proper methods of approach, the eradication of smallpox can be achieved in the shortest possible time.

We all agree that the surveillance component of the programme is most important. Nowadays, practically every house is visited at least three to four times in a month by one or another public health worker such as the Malaria Surveillance Worker, Vaccinator, Health Assistant, B.C.G. Worker, Sanitary Inspector, Vaccination Supervisor, Block Extension Educator, Midwife, Health Visitor, Medical Officer etc. according to a scheduled programme. Each of these workers must enquire about the existence of "fever with rash" cases (smallpox cases) with the help of the smallpox detection photo. The worker should immediately report the existence of such cases to the concerned medical officer for further action.

Once or twice a year we should observe a smallpox surveillance fortnight in which we should utilize the services of the public health workers by allotting them specific areas as elaborated in Appendix A.

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We should also utilize the services of other village officials like Kotwars, Village Level Workers, Teachers, Panchayat Secretaries etc. to report the occurrence of fever with rash cases immediately to the nearest medical officer, preferably personally or by stamped postcard (the postcard preferably should have a smallpox photo). These village workers should be periodically reminded to be watchful and report suspect cases at their meetings. The reporting of such cases should be appreciated so that the reporters are encouraged.

Besides the above, another easy method of surveillance is to utilize the services of local Primary Health Centre Workers like Health Visitors, Midwives, Vaccinators, Vaccination Supervisors, to do surveillance in the weekly market. These weekly markets are visited by people coming from at least 40 to 50 surrounding villages. In addition to surveillance work the workers should also find the unprotected children in the market and vaccinate them then and there.

Also the Medical Officers should enquire of all outpatients whether smallpox exists in their villages.

Labour camps, railway stations and Melas (festivals) are other important places for smallpox surveillance and vaccination of unprotected persons.

If surveillance is carried out as mentioned above, there would be no delay between the date of occurrence of a smallpox case and the date of notification, cross-notification, investigation and containment action.

The investigation of smallpox cases must reveal the source of infection and a complete link of cases; primary, co-primary and secondary cases must be known without loss of time. Surveillance workers must be allowed to enter neighbouring territories to find and confirm the source of cases. Such action should be appreciated.

During the course of investigation it is essential to find the contacts, close and distant, and protect them. The workers should stay in the affected area to search for smallpox cases. It is very important to know the would-be contacts. It is customary for relatives from other places to visit the patients with their children. The unprotected children come in contact with the patients and carry the infection to distant places. To prevent transmission of infection by relatives visiting from other places we must collect information about the would-be contacts and protect them before they come in contact with the patients.

For the second component of the programme, i.e. vaccination, it is imperative to carry out vaccination of the newborns and their mothers before they are discharged from the maternity ward. By doing this, not only will we protect the newborns and the mothers but it will become an occasion to educate the mothers, especially when the mothers do not accept vaccination readily.

There are four vaccinators and one Vaccination Supervisor for each block having a population of 80 000 to 100 000. If we calculate the work load for a vaccinator for a population of 20 000 to 25 000 at 40 per 1 000 birth rate and 20 per 1000 left out primary vaccinations, the vaccinator will have to perform only 7 to 10 primary vaccinations and 25 to 30 revaccinations per day if he works for 20 to 22 days a month. Midwives who cover an area of 1 000 to 2 000 population would have to perform only 8 to 12 primary vaccinations and 20 to 25 revaccinations in a month. If she properly maintains a birth register and the list of unprotected children, she will have to work only once in a month.

Every vaccinator and midwife should be allotted a specific area and population to carry out primary vaccination and revaccination as per targets. The vaccinator should visit the area as per programme prepared by the Medical Officer of the P.H.C. The Medical Officer should ensure that every village is visited by a vaccinator at least 3 to 4 times a year. The vaccinator/midwife should not only keep a record of the vaccinations performed and of the unprotected persons but make entries on a house wall stencil. This will enable the Supervisor to verify vaccinations and cover the left-out persons.

The vaccination work in the field should be reviewed monthly at the P.H.C. Headquarters by the Medical Officer. The Medical Officer should obtain the list of unprotected children and get them vaccinated by the local vaccination staff such as the Health Visitor, Vaccination Supervisor and District Mobile Squad. It is important to maintain the village-wise list of unprotected children. This will help in fixing vaccinator-wise, P.H.C.-wise and District-wise primary vaccination targets.

At District level, the District Health Officer and Medical Officer of P.H.C. should review the surveillance and vaccination work and take appropriate action to remove the lacuna.

Scar and pock-mark surveys help in detection of unprotected persons and give an idea of the reporting of cases.

On occasions such as meetings, seminars, festivals and in schools and during the surveillance and vaccination work the public health workers should educate people that smallpox is a dangerous disease; that affected persons should be isolated at home; and that people should immediately report the case to the nearest Medical Officer for treatment of its complications and prevention of its spread. The treatment of the smallpox case will itself impress upon the people that it is a disease and they will be free from superstitions.

The other papers enclosed herewith are self-explanatory.

APPENDIX A

Scheme

Smallpox Surveillance, Detection of Smallpox Cases  
and Containment Action

DEFINITION: Containment action includes finding source of infection, contacts of patients and vaccination of contacts and unprotected persons in smallpox affected area.

BLOCK:-

Number of villages..... Block.....

Period - 15 to 30 April (fix period as it suits)

S.No.	Name of worker	Designation	No. of villages	Names of villages
1	Shri	S.I./B.E.E.	10 to 15	
2	Shri	Vaccinator	(4x20 to 25, i.e. 80 to 100)	
3	Smt.	A.N.M.	(5x3, i.e. 15)	
4	Shri	H.A. (S.W.)	(5x10, i.e. 50)	
5	Shri	Other staff if any, like Leprosy, BCG Team, Trachoma workers etc.		

MODUS OPERANDI: Show smallpox recognition photo to schoolboys, teachers, sarpanch, panchayat secretary, V.L.W. and enquire if there is a case of fever with rash.

Inform M.O. if there is suspected case of smallpox immediately for verification, investigation and containment action.

Medical Officer of the Primary Health Centres, P.M.A., Health Visitors will help, guide and supervise.

All workers will do respective work in addition to the Scheme work.

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DEAR DR

EVEN A SINGLE SUSPECT CASE OF SMALLPOX  
MUST BE TREATED AS AN EPIDEMIC AND PUBLIC  
HEALTH EMERGENCY.

Some Important Points Regarding

NATIONAL SMALLPOX ERADICATION PROGRAMME

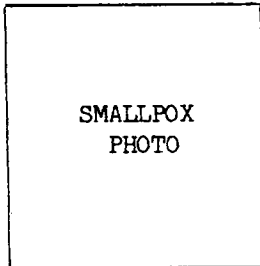
1. The responsibility of vaccination against smallpox lies with the Public Health Staff like, Sanitary Inspectors, Vaccinators, Health Visitors, Midwives, Vaidyas etc.
2. Each worker is to be allotted a specific area and Population and made responsible for systematic work which consists of:-
  - (i) Vaccination of all new borns in the Maternity Wards before mothers are discharged and all the new borns in rural and urban areas (Birth rate is approximately 40 per 1000 population)
  - (ii) Vaccination of left over population during scar and Pock Mark Survey and resistant population (the record of which is to be maintained at Primary Health Centre) by the District Mobile Squad 100% coverage of Primary Vaccination is to be achieved in all sectors of population enumerated.
  - (iii) Vaccination of mobile population like labourers, Sadhus, beggars etc. The entire labour population engaged in industrial undertakings and in construction programmes be revaccinated with the cooperation of the Administrators of these undertakings and population residing in slums in the new colonies springing up.
3. Revaccination of school going population at the age of 4-5 years (in primary schools and at 8-10 years, before they leave primary school.
4. Verification of all Primary Vaccination (100%) is to be done and should be reported if not successful.
5. All Vaccinators must maintain daily diaries (in the printed forms supplied) showing therein their day's work with regard to National Smallpox Eradication Programme.
6. Medical Officer and other medical workers should enquire from persons attending Primary Health Centre, Outdoor dispensaries and hospitals, whether fever and rash exist in the patients community and if they have been vaccinated and arrange to get the persons vaccinated, there and then, who have not been vaccinated. Enquiries should be made regarding the presence of smallpox and vaccination scars at markets.
7. Hiding of smallpox case is dangerous and must be discouraged. Even a single suspected case of smallpox should be notified to the Primary Health Centre and District Family Planning Cum Health Officer.
8. All the field workers are to be involved in smallpox surveillance (an effective mechanism of smallpox case detection and reporting) as per instructions contained in Directorate letter No. 11/NSEP/101316-358-C, dated 9.9.71 that all the field workers of Public Health Department including Family Planning, T.B., Leprosy and Malaria Surveillance workers should specifically enquire in the village they visit about the occurrence of smallpox case, since their last visit and report in this behalf to the Medical Officer i/c Primary Health Centre, whether or not cases have been observed. Truly speaking the workers should hunt for detecting smallpox cases.

9. Immediate epidemiological investigations and containment measures be carried out on the occurrence of smallpox. In the event of an imported case reports are to be immediately sent to the District/State of origin and the neighbouring Primary Health Centres and its district.

Assistant Director (Smallpox)  
Directorate of Public Health and  
Family Planning  
Madhya Pradesh, Bhopal.

NATIONAL SMALLPOX ERADICATION PROGRAMME

MADHYA PRADESH



CAUTION: SMALLPOX

ALWAYS REMEMBER:

Whenever any person develops fever with rash immediately report to nearest Medical Officer of the P.H.C./Dispensary and Hospital.

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NATIONAL SMALLPOX ERADICATION PROGRAMME

MADHYA PRADESH

PLEASE REMEMBER:

Smallpox is not a curse from God. It is a dangerous disease and occurs only in those who are not successfully vaccinated. Isolate the patients at home and inform the medical officer for treatment and prevent against its spread.

(English translation of Press letter in Hindi)



NATIONAL SMALLPOX ERADICATION PROGRAMME  
MADHYA PRADESH

Your new born ..... has been vaccinated against smallpox today. There will develop macule, papule and pustule. Infant is likely to have fever which should not worry you. If this reaction does not develop, ask for secondary vaccination.

(Translation of instructions given to mother in Hindi after vaccination in Maternity Ward)

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To:

All Dist. Family Planning cum  
Health Officers, Madhya Pradesh

All Medical Officers, P.H.C.s,  
Hospitals, Dispensaries

NEW YEAR GREETINGS

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I wish you and your subordinate staffs a Happy New Year.

I hope your efforts in early detection of smallpox cases and vaccination of all new borns and unprotected persons with the help of your staffs will help eradication of smallpox at an early date.

With regards and best wishes,

Yours sincerely,

MESSAGE FROM DR PRAKASH NARAIN, M.D.  
DIRECTOR OF HEALTH SERVICES  
MADHYA PRADESH  
BHOPAL

All the Civil Surgeons  
All the District Health Officers  
All the Superintendents of Hospitals  
All the Medical Officers  
i/c P.H.C.s and Dispensaries  
Madhya Pradesh

- Utilize:
1. The Services of Vaccination staff including midwives (which are sufficient in number now) effectively.
  2. Freeze-dried vaccine which is highly potent properly.

- Ensure:
1. Immediate case detection, immediate reporting, proper epidemiological investigations in tracing the source of infection and contacts.
  2. Prompt containment measures.

IF THE ABOVE MENTIONED POINTS ARE FOLLOWED  
EFFECTIVELY THE SUCCESS OF THE PROGRAMME  
IS ASSURED

Kindly acknowledge the receipt of this letter.

Dr Prakash Narain  
DIRECTOR

DIRECTORATE OF HEALTH SERVICES  
MADHYA PRADESH, BHOPAL

Dated .....

Dear .....,

I am sure you agree that there should be no blind, crippled and disfigured persons in our country. We have not been able to eradicate smallpox so far due to defective reporting of smallpox cases to the Medical Officers and poor vaccination status of our population. Please impress the population of your locality, the importance of reporting of smallpox cases to the medical officers and successful vaccination of the new born at the earliest.

(English translation of an appeal made in Hindi to Social, Political and Religious workers).

DIRECTORATE OF HEALTH SERVICES  
MADHYA PRADESH, BHOPAL

No. NSEP/101316/3584C

Bhopal, dated 9 Sept.,1971

To: All District Family Planning cum Health Officers  
Madhya Pradesh

Subject: Regarding the work of all village level workers (public health).

Refer to this Directorate No. 13/FP/S/T/15007-73-C dated 4/2/72, it was stated that to make available all necessary follow up facilities to cases of loop insertions and vasectomies. Instructions were also given therein that the services of all health staffs such as Para-Medical Assistants/T.B.Workers etc. be mobilised for Family Planning work.

Correspondingly, it is expected that the services should be utilized for N.S.E.P. work also as it can to eradicate smallpox.

Hence you are directed that you should issue orders to all such staff that during their visits to villages they should also ascertain if anybody is suffering from smallpox, particularly through such agencies as Village Chief, Sarpanch, Patel, etc. or any prominent person in the village. In case they come to know about any case they should immediately inform your nearest Medical Officer of the P.H.C.s or Dispensary so that effective measures can be taken up promptly.

Information should also be obtained from these workers regarding vaccination status of the children. In case it is found there are unprotected children immediately on receipt of information immediate action should be taken to protect them. It is also made clear the field workers should not give any excuse that their assigned work would suffer for doing N.S.E.P. surveillance and care for vaccinated children.

(Dr P. K.Bhose)  
DIRECTOR OF HEALTH & FAMILY PLANNING  
MADHYA PRADESH, BHOPAL

Endt. NSEP

Bhopal dated the 9th Sept.1971

Copy forwarded for information and necessary action to:

1. All Civil Surgeons, Madhya Pradesh
2. All Superintendents, T.B. Hospital, Madhya Pradesh
3. All Principal, Regional Family Planning Training Centres, Madhya Pradesh
4. All Joint Director of Health Services, Madhya Pradesh
5. Joint Director of Health Services, Malaria, Indore, Madhya Pradesh
6. All Dy. Director of Health Services, Malaria/Tuberculosis/Leprosy,  
Madhya Pradesh

(ENGLISH TRANSLATION OF INSTRUCTIONS ISSUED IN HINDI)