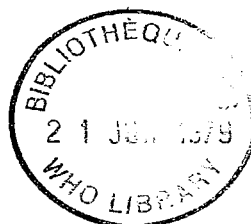




WORLD HEALTH ORGANIZATION  
ORGANISATION MONDIALE DE LA SANTÉ



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REPORT OF  
THE INTERNATIONAL COMMISSION FOR THE CERTIFICATION OF SMALLPOX ERADICATION  
IN THE YEMEN ARAB REPUBLIC  
2-10 June 1979

Summary and Conclusions

The members of the International Commission met representatives of the Ministry of Health, of other government departments and WHO in the Yemen Arab Republic (YAR) and received a full report of the activities which had been undertaken and which were supported by detailed documentation. The individual members of the Commission then paid visits to nine of the ten governorates.

On the basis of their investigations the Commission members concluded that:

1. There was no good evidence that there had been any endemic cases of smallpox in the country since the last recorded cases in 1969.
2. The requirements for the certification of smallpox eradication as established by the WHO Expert Committee on Smallpox Eradication (1971) have been fully met and therefore the eradication of smallpox from the Yemen Arab Republic can be regarded as having been achieved.

Recommendations

In formulating the recommendations the Commission had regard to the fact that YAR is adjacent to the Horn of Africa where the most recent known cases of smallpox occurred in October 1977.

The Commission recommended that:

1. An effective system for the surveillance of all communicable diseases should be developed with WHO assistance as needed. Outbreaks of chickenpox associated with death and cases of atypical chickenpox and of illness where a diagnosis of smallpox is suspected should be reported and investigated by experienced staff. Where appropriate, specimens should be collected for examination by a WHO reference laboratory.
2. Smallpox vaccination should not be continued after the certification of global smallpox eradication.

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### Commission membership and activities

The three International Commission members, Drs J.M. Aashi, T.J. Geffen and R. Netter, arrived in Sana'a on 2 June. Preliminary discussions were held with Dr Ahmed Al-Khader, Deputy Minister of Health, Dr M. Hajar, Director of Preventive Medicine, and other distinguished representatives of the Ministry of Health as well as Dr N.N. Beyhum, WHO Programme Coordinator, and other WHO personnel.

Dr Hajar presented the excellently prepared country report<sup>1</sup> and the members of the Commission then discussed the report and their proposed activities.

On the basis of the country report and their assessment of the situation, the Commission members decided to visit as widely as possible in the time available and, in fact, nine of the ten governorates, containing 99% of the population, were visited.

On return from the field visits the Commission met representatives of the Army Medical Services, School Health Services, and various medical organizations who confirmed that they had not seen or heard of smallpox cases since 1969.

The Commission's evaluation is considered under the following headings:

#### 1. Communicable diseases surveillance system

A system exists but the recording and reporting of communicable diseases is currently incomplete and inadequate. This is due to the poor geographical coverage of health facilities and to lack of compliance with the system even where they exist. It was understood that efforts are being made to strengthen the system.

#### 2. Health unit visits

The Commission members visited 15 health facilities, including hospitals, dispensaries, MCH centres and health centres, as well as governorate health offices.

The number of chickenpox cases seen by the health staff was generally low and no children had been observed with facial pockmarks in recent years. In general, infectious disease wards are established only at the time of specific need.

#### 3. Coverage achieved

The Commission members stopped at 52 populated places, ranging from large towns to small villages and including several previously visited by the national smallpox surveillance teams.

Enquiries and observations were made as to public familiarity with the disease, knowledge of recent smallpox, the presence and year of attack of persons with facial pockmarks, and smallpox vaccination coverage. Persons were found with facial pockmarks in practically all localities visited and were all specifically asked about the year of their smallpox illness and whether they knew of any more recent cases.

As schools were closed at the time of the Commission's visit, it was not possible to see large numbers of children in the time available.

### Findings

In every place visited it was evident that the disease was well known, that the significance of facial pockmarks was understood and that there was some knowledge of the time interval since the last outbreaks. This latter knowledge was not always precise but was sufficiently so for the Commission members to be confident that in no place visited was there good evidence of cases having occurred since the last known outbreaks in 1969. Despite

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<sup>1</sup>WHO/SE/79.138

specific examination of all available children, no one of less than 15 years of age was identified with facial pockmarks. This is particularly significant in view of the low vaccination coverage in the pre-school age group. Vaccination coverage varied considerably from place to place. It was generally higher in adults and school age children, ranging from 35-80%, but in pre-school children rates were considerably lower, not exceeding 30%.

The Commission members visited a number of places previously investigated by the national smallpox surveillance teams and in general were able to confirm the findings of those teams. There was also full agreement between the Commission members search assessment and that previously conducted by WHO, in those places where a comparison was possible.

In one instance the Commission was told that cases of smallpox with some deaths had occurred in one district of Ibb Governorate. A visit was made to the district and some of the alleged cases were seen and found not to be suffering from smallpox.

Two outbreaks for which results of laboratory testing of specimens remained pending were investigated and the diagnosis of smallpox again definitely excluded.

There is no laboratory in the country retaining stocks of variola virus or examining specimens.

Variolation was practised in the past but there is no evidence that it has been undertaken in recent years. No variolation scars were seen in young persons.

Table 1: Coverage achieved and Pockmark Survey Results

Places visited:

Governorates	9
Districts	27
Localities	52
Health units	15

	Pre-school age	School age	Adult
Persons examined	606	1 597	<u>a</u>
Persons found with facial pockmarks	0	0	101

Most recent year of smallpox infection 1965<sup>b</sup>

<sup>a</sup> Total number of adults observed not recorded.

<sup>b</sup> In Taiz one middle-aged man was seen with facial pockmarks who claimed to have contracted his illness in 1974. Precise interpretation and further investigation were impossible at the time and there is considerable doubt about the accuracy of this information. In addition, the Director of the Revolution Hospital in Taiz mentioned a case of suspected smallpox who had presented himself to the outpatients department of the hospital two or three years ago. No record of the case was available either in the hospital or in the Director General of Health's office in Taiz. In the light of the epidemiological background it was considered that this rumour could be disregarded.

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Acknowledgements

The International Commission acknowledges the help of the representatives of the Government of the Yemen Arab Republic and the World Health Organization which made it possible to undertake their task.

The Commission members would like to pay a sincere personal tribute to those who accompanied them on their field visits and whose skilled and friendly assistance contributed greatly to the success of the work.

COMPOSITION OF TEAMS FOR FIELD VISITS

Team 1

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|---------------------|--|
| Dr J.M. Aashi       | - Assistant Director General of Preventive Medicine, Ministry of Health, Saudi Arabia; International Commission Member |
| Mr Abdu Ela Shahari | - Sanitarian, Department of Preventive Medicine, Ministry of Health, Yemen Arab Republic                               |
| Mr R. Steinglass    | - WHO Operations Officer, Smallpox Eradication Programme   |
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Team 2

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|---------------------|---|
| Dr T.J. Geffen      | - Senior Principal Medical Officer, Department of Health and Social Security, UK; International Commission Member |
| Mr Abdu Jalil Saleh | - Field Supervisor, Smallpox Eradication Programme  |
| Dr M.A. Parvez      | - WHO Epidemiologist, Smallpox Eradication Programme  |
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Team 3

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|---------------------|--|
| Dr R. Netter        | - Director, Laboratoire national de la Santé publique, France; International Commission Member |
| Dr Abdulla Al Kipsi | - Epidemiologist, Department of Preventive Medicine, Ministry of Health, Yemen Arab Republic   |
| Dr J. Tulloch       | - WHO Consultant, Smallpox Eradication Unit, Geneva  |
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ANNEX 2

ROUTES TAKEN BY THREE TEAMS DURING FIELD VISITS

