# WORLD HEALTH ORGANIZATION

SIXTH WORLD HEALTH ASSEMBLY

Provisional agenda item: 6.5.5

ORGANISATION MONDIALE DE LA SANTÉ

> A6/18 // 30 April 1953

ORIGINAL : ENGLISH

STUDY ON A WORLD-WIDE PROGRAMME AGAINST SMALLPOX

### 1. Introduction

The Executive Board at its eleventh session examining the paper presented by the Director-General on "Further Action on General World Health Problems" passed the following resolution (EB11.R58):

"The Executive Board

Having noted the report of the Director-General dealing with further action on general world health problems, and

Taking note of resolution WHA4.80 of the Fourth World Health Assembly, referring to the need for a general co-ordinated programme calling for action by all governments to improve health conditions, to eliminate sources and vectors of diseases and to raise the level of protection against certain communicable diseases by vaccination and other methods,

Noting also the interest expressed by two regional committees in campaigns against smallpox,

1. RECOMMENDS that the Sixth World Health Assembly consider the adoption of the Director-General's suggestion that WHO should stimulate certain world-wide programmes;

2. CONSIDERS that a campaign against smallpox would be suitable for such a programme; and

3. REQUESTS the Director-General to submit to the Sixth World Health Assembly a study on the ways of carrying out such a world-wide campaign, including:

(1) a general programme of work to be implemented by WHO;

(2) the estimated costs to the Organization.

<sup>1</sup> Document EB11/63

<sup>c</sup> Off.Rec.World Hlth\_Org. 35

The Executive Board further decided that the paper should be presented to the Sixth World Health Assembly. This is therefore attached herewith (ANNEX II).

#### 2. The Need for World-Wide Programmes

The Constitution and the early Health Assemblies established the principle of general programmes and priorities. The present system of advisory services has now reached a stage where technically, administratively and even politically there is a need to establish one or more programmes with an appeal to all governments as a part of a world-wide effort. Through such a general direct practical world programme it is desirable to demonstrate the importance WHO has for every Member State and also its rôle in dealing with world health and medical problems, not only through the necessary and valuable present form of direct assistance to governments, but also by concerted international action.

## 3. The Choice of Smallpox as a Subject for such a Programme

It was considered in the original paper that smallpox was a suitable subject on which to initiate a system of world-wide programmes since it is a matter of direct interest to the majority of governments and an international problem with many serious aspects. It has featured prominently in the deliberations of the Health Assembly, Executive Board and Regional Committees.

Further reasons for the selection of this disease were that people of all races and ages are susceptible, simple and effective medical means of prevention are available, and international co-ordination is required for dealing with many of its features.

### 4. The Incidence of Smallpox and Epidemiological Considerations

No attempt is made to give a detailed account of the incidence of smallpox in different countries and for more specific information reference should be made to the articles "Smallpox Prevalence Throughout the World During and After the Second World War"<sup>1</sup> and "A World Review of Smallpox Incidence".<sup>2</sup> It must be emphasized, however, that the reported incidence by no means states the total situation. Much smallpox occurs either undetected or unrecorded. For many countries and for some years, the data are missing or incomplete.

From the available data it can be said that roughly 2,400,000 cases and 1,000,000 deaths from smallpox have been reported between 1940 and 1952. For the reasons already given, it can safely be said that the figures represent only a fraction of the actual incidence of smallpox in the world but it is known that the disease continues to be a permanent threat to the lives of millions of people and for all countries it remains a continuing menace.

If, in the affected countries the endemic areas can be determined and controlled, smallpox as an international hazard would be reduced. In a number of countries, however, these endemic areas though not geographically big are difficult of access which in part explains the lack of vaccination in such communities. Where endemic zones are in an inaccessible country, it is possible to consider the protection of the main concentrations of population by maintaining a high level of vaccination in those areas which serve as a channel of communication between the sources of infection and the main urban centres.

<sup>&</sup>lt;sup>1</sup> EVS 13-Vol.1, No.13, June 1948

<sup>&</sup>lt;sup>2</sup> EVS 54-55. Vol.IV, Nos.11-12, November-December 1951 (Copies of this article are available on request)

As the endemic foci of the disease are a permanent threat to neighbouring areas and to other countries, it is essential that these endemic foci be defined.

Especially in those countries where smallpox persists, further epidemiological investigation required is that of defining the conditions such as level of vaccination, determination of infection, method of spread, etc., which contribute to the difficulties of controlling and preventing the disease.

When examining the smallpox situation and the problem of its control, a country might consider, inter alia, the following:

(a) the state of the health services available to diagnose, treat and control the disease. Related to this will be the social and administrative organization of which the health services will be a reflection.

(b) the availability of knowledge of the incidence and distribution of the disease, and the factors correlated with such incidence.

(c) the attitude of the various communities to the disease and to the methods of controlling and preventing the disease.

(d) the methods of control available, including vaccination and the nature of the difficulties, such as inactive vaccines, poor techniques, etc., which prevent control.

(e) the availability of other services, such as diagnostic laboratory and hospital services needed to ensure adequate control and treatment of the disease.

### 5. World-Wide Smallpox Control Programme

The purpose of a world-wide WHO programme against smallpox would be to stimulate and assist countries to develop effective, permanent and economical control arrangements as an integral part of their national public health services. An effective

A6/18 page 4 national organization for the control of the disease would include:

(a) trained personnel for planning and directing the service:

(b) health educational services to secure the willing co-operation of the public:

(c) a system that provides rapid notification and epidemiological information concerning the occurrence of the disease and also the state of vaccination of the population:

(d) availability of reliable potent vaccine:

(e) campaigns against the disease in endemic areas:

(f) vaccination arrangements, including re-vaccination, to provide for the vaccination of an adequate proportion of the population to prevent the occurrence and spread of the disease:

(g) the provision of control measures, including smallpox case finding, laboratory facilities and vaccination and treatment facilities.

It is valuable to recognize that the provision of services for smallpox prevention and control can frequently, and indeed advisedly, be developed as part of a system for the control of other communicable diseases.

As any country continuing to harbour smallpox is not achieving the necessary protection for her own population and is also a threat to her neighbours and, indeed, to the whole world, there is a responsibility on every state to undertake smallpox prevention and control.

The rôle of WHO, in keeping with its Constitution and basic policies, is to provide international services which can assist countries to achieve the necessary development of the national health services for controlling this disease. A6/18 page 6

If the World Health Assembly accepts the desirability of a general co-ordinated effort to bring this international hazard under control, then the following international measures for assisting countries could be made available through WHO:-

(a) Providing countries through their WHO Regional Organizations with such consultant services as they may request for the preparation of national smallpox control campaigns. These consultant and advisory services would assist in meeting such problems as the determination of the nature and epidemiological characteristics of endemic smallpox and the evaluation of smallpox control services, methods of diagnosis and treatment and methods of securing public co-operation. An essential part of any control service for which countries may require assistance will be the training of personnel.

(b) Requesting WHO Regional Committees to include regional smallpox control programmes in their proposed annual programme and budget estimates submitted to the Director-General for presentation to the Executive Board and the Health Assembly.

(c) Providing both regional and world advisory services to enable countries to obtain advice on the various techniques, such as smallpox laboratory diagnosis or smallpox vaccine production.

(d) Establishing certain world services required by more than one country and which call for international co-ordination, such as the establishment of acceptable techniques of laboratory diagnosis, vaccine preparation and standardization.

(e) Advising countries on the application of quarantine measures as accepted in WHO Regulations No. 2, so as to reduce smallpox as an international hazard and a deterrent to international movement of persons and goods. (f) Assisting campaigns for the co-ordinated effort of national health authorities, medical and allied professions and the public through both government and non-government organizations.

(g) Co-ordination of a research programme through assistance to national institutions to study such generally important problems as the nature and behaviour of the vaccinia and variola viruses, laboratory diagnosis, and the development of improved vaccines etc., and new methods of treatment.

### 6. Proposed WHO Programme and Budget for Smallpox Campaign

A summary of a provisional five year proposed budget is annexed (Annex I). If the Assembly endorses the suggestion of a campaign, the Director-General would plan to incorporate the first proposals in his proposed programme and budget estimates for the year 1955. However, even before this date, it would be possible for him to meet requests from countries for such assistance as fellowships and consultants to deal with smallpox within the programmes already authorized for 1953 and 1954. In addition, WHO staff could prepare technical material on various aspects of the problems related to the disease and its control.

The proposed budget has been prepared primarily to provide direct services to countries. Every effort would be made to ensure that the necessary central associated services, both technical and administrative, would be discharged without addition to the existing central staffs.

ANNEX I

PROPOSED PROGRAMME AND BUDGET ESTIMATES

		1	·			
Subject	Personnel	C First	0 fiv	S 7e 3	T vears	in \$
		1	2	3	4	5
Fellowships in vaccine production methods and laboratory diagnostic techniques	10 each of 6 months each	20,000	20,000	20,000	20,000	20,000
Consultants to advise countries on a variety of subjects; epidemi- ological surveys, laboratory services, vaccine production and testing, health educa- tion; programme plan- ning and assessment	Consultant months lst year: 24 Subsequent years: 36	31,200	46,800	46,800	46,800	46,800
Field teams to assist countries in estab- lishing campaigns in endemic areas	Say 2 teams at \$25,000 per team for 1 year	50,000	50,000	50,000	50,000	50,000
Fechnical training in smallpox diagnosis; vaccine production through the seminar method	Seminars and courses		10,000	10,000	10,000	10,000
Consultant group to advise on technical problems of (a) small- pox prevention and control; (b) vaccine production and stan- dardization and asso- ciated virus research	6 experts each for l week(a) (b)	5,300 5,300				
Grants to national in- stitutes to assist in field trials, labora- tory research, etc.		5,000	5,000	5,000	5,000	5,000
TOTAL \$		116,800	131,800	131,800	131,800	131,800