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PROVISIONAL SUMMARY RECORD OF THE TWENTY-SECOND MEETING

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CHAIRMAN: Dr A. J. de VILLIERS

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Note: Corrections to this provisional summary record should reach the Chief, Office of Publications, World Health Organization, 1211 Geneva 27, Switzerland by 11 March 1977.

4. SMALLPOX ERADICATION: Item 19 of the Agenda (Resolution WHA29.54; Document EB59/19)

Dr LADNYI (Assistant Director-General) introduced the report by the Director-General on the smallpox eradication programme. Although it had been hoped that the total eradication of smallpox would have been achieved, there were still three known active cases. Since October 1975, when the last case was registered in Bangladesh, there had been a period of fifteen months when cases had only been registered in Ethiopia and Somalia. An intensive control programme in Ethiopia had led to success; the last known case in that country had occurred in August 1976. After that for a period of seven weeks no case of smallpox was registered in the whole world. At the end of September, however, five cases were registered in Mogadishu, the outbreak being caused by spread from a previous outbreak in Ethiopia. Although the Government of Somalia, with the assistance of WHO, had made intensive efforts to prevent further transmission of the disease, to date 36 cases had been registered. All the patients had been isolated but the disease had spread slowly in a well-vaccinated population, the last case being reported on 6 January 1977. There was a low probability of new cases but as the population was nomadic and widely dispersed, several months of search would be necessary before eradication could be confirmed.

Intensive efforts were being made to detect cases in areas where recent infections had been recorded. Those efforts would continue for several years until international commissions, convened for the purpose, could confirm that the disease had been eradicated. In December 1976, Afghanistan and Pakistan had been declared free of smallpox, joining the increasing number of countries where eradication had been confirmed. International commissions would be set up in April 1977 for Bhutan, India, and Nepal, and for nine countries of Central Africa. Similar commissions would be set up in other countries once the necessary documentation had been prepared.

More than 50 laboratories had destroyed their stocks of variola virus. A total of 29 laboratories in 18 countries were still registered as retaining stocks. The WHO Committee on International Surveillance of Communicable Diseases had recommended that stocks of the virus should only be retained in the seven laboratories designated as WHO Collaborating Centres. Letters noting that recommendation had been sent to other laboratories retaining stocks. A group of experts would be convened during the second half of 1977 to draw up guidelines for safety in the storage and handling of virus stocks.

During 1976, three new cases of human infection due to monkeypox virus had been detected in Zaire. However, the infection had not spread.

It was becoming increasingly clear that there was no natural reservoir of the smallpox virus.

Work was being undertaken to publish details of the smallpox eradication programme and of the experience gained during its implementation. A documentary film had been considered but the cost, about US$ 200 000, was thought to be large compared to the benefits. It was hoped that voluntary contributions might be forthcoming for such a project.

Although the complete eradication of smallpox appeared to be at hand, continued support was essential to ensure that the programmes in Ethiopia and Somalia and the other activities mentioned were brought to a successful conclusion. If the last known case were to be detected by January 1977, an estimated US$ 2.0-2.5 million would still be required, in addition to funds available from the WHO regular budget and the Director-General's Development Programme, to complete the smallpox eradication programme.

Further donations of vaccine were needed in order to build up a reserve sufficient to vaccinate 200-300 million persons, as recommended in resolution WHA29.54.

Dr HASSAN pointed out that the outbreak of smallpox in Somalia had resulted from importation of the infection from a neighbouring country. It appeared to be inevitable that such importations would occur if the disease were present among inhabitants close to a border, especially in nomadic areas. He emphasized the need for increased surveillance in such border areas. However, he wished to know who should sponsor or coordinate such activities.

When the first five cases of smallpox had been registered in Mogadishu, Somalia, the Government of that country had instituted measures to control the outbreak. House-to-house searches for cases were instituted, vaccination and revaccination campaigns were started, interior regions of the country were alerted and instructions were issued for checkpoints to be set up in towns and villages. In addition the representatives of international organizations concerned with health, the army health service and other health workers were requested to report all cases of fever, rash and similar manifestations.

The Government of Somalia had indicated that it would spare no effort to stop the transmission and achieve the eradication of smallpox. WHO had been giving assistance since September 1976. Further financial support was urgently needed.

Professor AUJALEU said that despite the most recent incidents and cases it was clear that the goal of smallpox eradication had almost been reached. He was disturbed to learn that in Mogadishu smallpox had spread in a well-vaccinated population. Surely it should not be possible for the disease to spread if a population had really been well vaccinated.

Dr VIOLAKI-PARASKEVAS said that in countries that had been free from smallpox for many years there was considerable discussion on the need for the retention of a compulsory vaccination policy. She wished to know if the planned publications mentioned in the Director-General's report would contain guidelines on that aspect.

Dr GONZALEZ CARRIZO (alternate to Dr Ortega) noted the comments contained in the Director-General's report on vaccine reserves. In a country he knew well that aspect had been the subject of considerable discussion by experts. He was therefore pleased to see that a world conference on the problems of eradicated smallpox was being planned. Although many experts were of the opinion that vaccination could be suspended there were still some doubts remaining. He wished to know whether it was really possible to institute effective epidemiological surveillance in all countries, whether it was certain that in the future doctors with no experience of smallpox would be able to recognize and diagnose the disease quickly and whether adequate administrative and technical systems would be available to institute control procedures at short notice when in the year 2000 the ratio of vaccinated to susceptible persons would be very small. He wished to be certain that there would be no risk of a tragic outbreak of smallpox in the future.

Dr MUKHTAR hoped that the few remaining foci of smallpox would soon be eliminated. He agreed with Professor Aujaleu that the reappearance of cases in a well-vaccinated population was disturbing and he wished to know whether it was the result of inadequate coverage or whether the vaccine used had been defective. He suggested that improper storage of the vaccine might have been the cause of its failure. Funds from WHO and other sources should be made available to ensure that efforts were continued until the programme had been successfully concluded.

Outbreaks in countries bordering one in which a known focus remained, such as the outbreak in Somalia, which had resulted from cases imported from the focus in Ethiopia, were of great concern. The more so since migration was not just confined to nomadic movements in border areas. He hoped that full support would be given to such countries in order that they might maintain vigorous surveillance for as long as was needed.

Dr DLAMINI said that in view of the reappearance of cases in a country previously declared free of the disease it was essential to encourage all countries bordering on countries where a focus of infection remained to undertake vigorous surveillance and vaccination programmes. Since vaccination programmes never reached all in a population, surveillance was important to identify those cases. He supported WHO's continued assistance to Somalia and hoped that assistance would also be given to neighbouring countries. He expressed the hope that by the January 1978 session of the Board no further cases would have been reported.

Dr HASAN joined previous speakers in congratulating all those who had been concerned with the smallpox eradication programme on their successes. He suggested that in areas with remaining foci the technique of the vaccination and quality of vaccine should be carefully controlled. He hoped that further financial assistance to Somalia would be forthcoming from WHO. In some instances WHO had provided a special allocation in the programme to increase the incentive of workers in the field. He felt that such assistance was also needed in Somalia.

Professor REID, referring to the registry of laboratories retaining stocks of the variola virus, said that he was pleased to see the recommendation of the WHO Committee on International Surveillance of Communicable Diseases that only the seven WHO Collaborating Centres should retain stocks. He hoped that at the May session of the Board the response to the letter sent out to laboratories would be known. Once the remaining foci of the disease had been controlled the reduction in the number of laboratories retaining stocks should be the priority. However, he believed that considerable pressure would have to be exerted in order to reduce the number of laboratories with stocks to a level consistent with scientific requirements. WHO should play a guiding and coordinating role in that.

Dr CHUKE said that there had been worldwide recognition of the importance of the impending eradication of smallpox. He wished to know whether the slow spread of smallpox that had occurred in a well-vaccinated population was the result of infection of recently vaccinated persons and whether the antibody studies done had had any significance. He also wished to know whether there was any likelihood of mutation occurring in a virus which would produce a virus giving identical clinical manifestations, a smallpox of the future.

Dr PINTO associated himself with the concerns expressed by previous speakers. He suggested that, in view of the recent outbreak, it might be useful to make a global analysis to determine the percentage of persons vaccinated in countries at risk and to determine what means were available to cope with a sudden outbreak in any country.

Dr TAJELDIN (alternate to Dr Al-Baker) wished to know whether the International Certificate of Smallpox Vaccination was necessary for persons travelling to or from countries that had been free of the disease for a number of years. He suggested that revaccination requirements be restricted to travellers to and from areas where a risk of contracting the disease remained, as was the practice for cholera vaccination.

Dr SHAMI wished to know how many of the patients who had contracted monkeypox virus infections had been previously vaccinated and how long the virus could survive in bedding or clothing, remaining sufficiently virulent to cause an infection.

Dr SY agreed that the total eradication of smallpox would indeed be a significant achievement. Everything should be done to ensure the rapid elimination of the disease from countries where it had reappeared. Further, strict surveillance would have to be maintained following eradication to ensure that the eradication was real and definitive.

Dr ACOSTA welcomed the leadership shown by WHO in the smallpox eradication programme. He agreed that guidelines on future vaccination policies would be of great use to Member States. In the Philippines, the decision to stop vaccination activities had been postponed in view of the continued risks of infection.

Dr TARIMO expressed his satisfaction with the measures being taken by the Government of Somalia, in collaboration with WHO, to eradicate the disease and wished that country every success. There were many lessons to be learned from the programme. At first it had been thought that vaccination alone would be enough to eradicate the disease. Subsequently it had become clear that epidemiological surveillance was also an important factor. He was confident that with the experiences gained it would be possible to tackle the remaining problems and achieve complete eradication.

Dr VENEDIKTOV expressed his satisfaction at the successes achieved by the programme that could scarcely have been imagined a few years previously. He was sure that the outbreaks in Somalia and Ethiopia represented the end of the struggle. The eradication of one of the most dangerous diseases by means of a coordinated effort under the aegis of WHO was of great significance for mankind. The Director-General had acted wisely in not hurrying to make any announcements regarding eradication. His decision to wait had proved right. It was essential to maintain vigilance and to correct vaccination practices where necessary.

He agreed with the suggestion contained in the Director-General's report concerning documentation of the programme. The various countries and specialists who had contributed to the programme should be encouraged to participate in order to obtain all the information available for that documentation.

He welcomed the Assistant Director-General's review and noted that he had had six years' personal experience with the smallpox eradication programme in Africa. He expressed his appreciation of the work done by the Chief, Smallpox Eradication, who was soon to leave the Organization.

The CHAIRMAN endorsed the views expressed on the successes of the programme.

Dr LADNYI (Assistant Director-General) said that the many questions put by members indicated that interest in the programme was not waning.

Although infection might spread in a well-vaccinated population it did not spread to well-vaccinated individuals. Recent cases had occurred only in persons who had not been vaccinated or in those where vaccination had had a doubtful result. Data received indicated that not less than 90% of the population of Mogadishu had been vaccinated, on the basis of postvaccinal scar surveys.

As soon as the Mogadishu outbreak had been notified, the Director-General had taken all the necessary measures to help the Government of Somalia to deal rapidly with the situation. Experts had been sent to assist national services. Assistance to neighbouring countries had also been given with vaccines and allocations of sums of money. The Director-General and the Secretariat were studying the possibility of finding further resources to help the Government of Somalia.

He agreed with the views of Dr Tarimo. He noted that in some African countries eradication had occurred before mass vaccination had been completed.

Dr HENDERSON (Smallpox Eradication) said that it was known that infections could spread in well-vaccinated populations and that surveillance, with the identification and vaccination of contacts was the key to stopping that spread.

It was 18 months since a case of variola major had been reported. The only smallpox occurring was variola minor, with a mortality of 1% or less. It was at least 25 years since smallpox had spread from Ethiopia or Somalia to any other continent. The risk of infection spreading to another part of the world was therefore minimal. In consequence a number of countries had stopped routine vaccination. Others had decided to continue vaccination for a further 1-2 years, in some cases on the grounds of possible administrative difficulties in reinstituting smallpox vaccination programmes should it be necessary rather than because of the risks of smallpox. Vaccination policy should be decided by individual countries in the light of their own experience and problems. It would be desirable that vaccination and surveillance be continued in Africa for the foreseeable future, since smallpox was still present on that continent. It was therefore difficult to elaborate global guidelines for a vaccination policy.

Resolution WHA29.54 had urged governments to restrict their requests for International Certificates of Smallpox Vaccination to travellers who had visited a smallpox-infected country within the preceding 14 days. A great many countries had changed their requirements in the previous six months. He hoped that more would do so in the near future.

There was good evidence to show that the possibility of a mutation of the smallpox virus or an animal pox virus or of a scab found on the floorboard of a hospital causing a future outbreak was highly unlikely. Great efforts had been made over the past 10 years to identify sources of outbreaks. All had been traced to an infected individual coming from a known infected area and no sudden unaccountable outbreak had been recorded.

Of the total of 23 cases of monkeypox diagnosed two had previously been vaccinated, but a long time prior to infection. That disease did not spread easily in humans and posed no risk of causing outbreaks.

It was fairly certain that once the last human chain of transmission had been broken the disease would be eradicated. However, it would be prudent to maintain a reserve of vaccine to cope, if necessary, with currently unforeseen problems. Vaccine kept at -20°C remained viable for many years, 20-30 years at least. Some countries had already stored vaccine. Resolution WHA29.54 had recommended that WHO should keep a large reserve of vaccine and further donations were required to bring that reserve up to the suggested level.

He outlined the risks of an unexpected outbreak in the future. Smallpox did not spread rapidly, so that with the techniques available it should be possible to contain any outbreak within a relatively short period. It would be possible to stop routine vaccination at some stage although that stage was still difficult to determine.

Dr JAKOVLJEVIĆ wished to join with Dr Venediktov in expressing his appreciation of all the work done by the Chief, Smallpox Eradication, for the smallpox eradication programme and to thank him in particular for his valuable assistance in the field during the last recorded epidemic in Europe.

Dr HERRARTE WARTRAUX said that in Guatemala the WHO vaccination certificate was no longer required and the rate of vaccination had been reduced. Debate on whether or not to vaccinate continued. Dr Pinto had asked how countries were to be informed, and supplied with vaccine, in the case of an outbreak, and that question had not been answered completely. Although the head of the programme was optimistic, he should be ready for any eventuality.

Dr LADNYI (Assistant Director-General) said that it was mentioned in the Director-General's report that resolution WHA29.54 called for a reserve sufficient to vaccinate 200 to 300 million people in the case of a recurrence of smallpox. The vaccine would be available as soon as an outbreak was reported. Smallpox vaccine was effective not only against the smallpox virus but also against monkeypox and other virus pox. Specialists thought that any mutations would take a long time to develop in such a way as to be dangerous. It was unlikely that that would happen and, even if it did, the danger would probably not be from smallpox but from an analogous virus.

At the request of the CHAIRMAN, Dr BUTERA (Rapporteur) read out the following draft resolution:

The Executive Board,

Having examined the report of the Director-General on the smallpox eradication programme;

Noting resolution WHA29.54;

1. EXPRESSES APPRECIATION of the intensive efforts being made by the Organization and the countries concerned to interrupt smallpox transmission at the earliest possible date and to verify and document this achievement;

2. ENDORSES the recommendation of the Committee on International Surveillance of Communicable Diseases that stocks of variola virus be retained only by WHO Collaborating Centres under conditions ensuring maximum safety;

3. URGES Member States to continue to provide maximum possible support to the programme so that it may be completed as soon as possible.

Decision: The resolution was adopted.