



THIRTY-FIRST WORLD HEALTH ASSEMBLY

COMMITTEE A

PROVISIONAL SUMMARY RECORD OF THE SIXTEENTH MEETING

Palais des Nations, Geneva  
Tuesday, 23 May 1978, at 9h00

CHAIRMAN: Dr N. N. MASHALABA (Botswana)



CONTENTS

	<u>Page</u>
1. Fourth report of Committee A . . . . .	2
2. Review of specific technical matters (continued):	
Malaria control strategy (continued) . . . . .	2
Technical cooperation among developing countries . . . . .	12
Education of people in community health . . . . .	14

Note: Corrections to this provisional summary record should reach the Chief, Office of Publications, World Health Organization, 1211 Geneva 27, Switzerland, before 7 July 1978.

SIXTEENTH MEETING

Tuesday, 23 May 1978, at 9h00

Chairman: Dr N. N. MASHALABA (Botswana)

1. FOURTH REPORT OF COMMITTEE A: Document (Draft) A31/68

Dr VALLE (Bolivia), Rapporteur, drew attention to the draft fourth report (document (Draft) A31/68).

Decision: The fourth report of Committee A was adopted.

2. REVIEW OF SPECIFIC TECHNICAL MATTERS: Item 2.6 of the Agenda (continued)

Malaria control strategy: Item 2.6.8 of the Agenda (Official Records No. 245, pages 8-9, paragraphs 41-46; Document A31/19)

The Committee had before it a draft resolution (reproduced in the summary record of the fifteenth meeting).

The CHAIRMAN drew attention to the following proposed amendments to that resolution:

The delegation of Iran had proposed an additional phrase at the end of operative paragraph 4(3), reading:

"and to study ways and means of securing to Member States reliable sources of pesticides and antimalaria drugs;"

The delegation of Italy had proposed the addition, under operative paragraph 4, of a new subparagraph (7), reading:

"to give a higher priority to the malaria control programme in the proposed programme and budget for 1980-1981, so that the resources allocated, whether in the regular budget or through the mobilization of extrabudgetary resources, at the different levels of the Organization are adequate"

The present subparagraph (7) would then become (8).

The delegation of Mozambique had proposed the addition of a new subparagraph (8) under operative paragraph 4, to read:

"to take the appropriate steps in order to achieve an active coordination of malaria control activities with the achievements of the Special Programme of Research and Training in Tropical Diseases"

the present subparagraph (8) becoming (9).

Mr HOSSAIN (Bangladesh) asked that his country should be included in the list of sponsors of the draft resolution.

Dr MARKIDES (Cyprus) said that, since 1948, Cyprus had succeeded in eradicating malaria, but the danger of resurgence persisted because (1) although an island, Cyprus was surrounded by countries in which malaria was endemic; (2) the Government was unable to control that part of the island occupied by troops from a malaria-ridden country; (3) a large number of Cypriots were working in countries where malaria was not yet under control; and (4) modern means of transport facilitated the spread of the disease. The Government had therefore spent

thousands of pounds on spraying the breeding-places of Anopheles with large quantities of DDT, which polluted the environment. It was also taking preventive measures at ports and airports and, in that respect, wished to thank WHO and the Regional Director for their assistance. The delegation of Cyprus supported the draft resolution as amended.

Dr GONZALEZ GALVEZ (Panama) said that, unlike many countries in which there had been a recrudescence of malaria, Panama was happy to report considerable improvement in the situation, with only three provinces still affected. In 1977, there had been 674 cases (of which 120 were imported), as opposed to 727 in 1976. The morbidity rate was 38 per hundred thousand, and the mortality rate zero. Since the establishment of the national eradication service in 1956, the aim had been total eradication, for the achievement of which it counted on the help of the international organizations and the active participation of the population. The delegation of Panama supported the draft resolution as amended.

Dr BEAUSOLEIL (Ghana) recalled that, 25 years ago, countries everywhere except tropical Africa had embarked on malaria eradication programmes, which had initially achieved control and even eradication in many areas. However, most of those programmes had collapsed and malaria was perhaps an even more serious problem today than it had been 25 years ago: resistance of vectors to insecticides and resistance of plasmodia to drugs, for example, had not existed before. Even in non-endemic areas and areas from which malaria had been eradicated, the number of cases was increasing. While national governments were partly to blame, inasmuch as malaria was a national health problem, WHO had also failed in its task of leadership. At one time, there had been several malaria eradication training centres in the world: most of these, instead of being converted into centres for training in control of malaria or other vectorborne diseases, had been closed, and the number of malariologists left could be counted on the fingers of one hand. Even in WHO, the staff of the headquarters division dealing with malaria had been reduced, and there were few malaria advisers left in the regional offices.

Malaria must however be given the attention it deserved. As with smallpox, it should be possible to mobilize the resources needed to eradicate the disease by the end of the century. In principle, the delegation of Ghana agreed with the strategy proposed for malaria control - but there was a desperate lack of trained personnel at national and regional levels, and few governments could afford the services needed for prompt diagnosis and treatment or the amount of chloroquine required, not to mention the difficult logistic problems such a programme would present.

Action was thus called for at the national, regional and global level. At national level, something had to be done to change the attitude of administrators and politicians towards a disease that killed more people annually than cholera or diarrhoeal diseases. In malaria control, the logical approach was to start with a reduction of the mortality and suffering caused by the disease and, as resources increased, move on to the reduction of morbidity and the interruption of transmission, etc. WHO should consider re-establishing suitable training centres, perhaps in collaboration with universities or health institutes, in strategic places. Training need not be confined to malaria but could include other vectorborne diseases. There was a need for headquarters and regional task forces that could be called upon to carry out specific functions.

Plasmodium resistance to chloroquine was gradually spreading across the world from South-East Asia and would sooner or later reach the African Region. WHO could play a useful role in developing programmes for monitoring and surveillance of levels of susceptibility of P. falciparum to chloroquine in certain strategic areas. It could also organize priority research into the causes of resistance, the side-effects of chloroquine, new chemotherapeutic agents, resistance to insecticides, etc.

Ghana supported the draft resolution and wished to be included in the list of sponsors. However, it proposed that operative paragraph 4(1) of that resolution be amended to read: "to stimulate and strengthen technical cooperation between . . .".

Mr HAZRATI (Iran) said that in his country some 20 years ago, malaria had represented a risk for 90% of the population. The initial results of the malaria eradication programme, started in 1957, had been so successful that within a few years two-thirds of the country had reached the consolidation phase. Vector resistance to organochlorine insecticides, combined with technical and operational problems, had then checked progress in the south. At the same time, development projects had given rise to considerable internal migration which had

threatened to reinfest the north. Thus, in 1967, residual spraying of malathion and larviciding using chemicals or larvivorous fish had been undertaken in the south, with satisfactory results until 1972. In 1973, active foci of malaria transmission had been detected in two south-eastern provinces and subsequently in the consolidation areas. Studies had shown that they were due to (1) resistance of Anopheles sacharovi, A. stephensi and A. culicifacies to DDT; (2) change of behaviour in A. superpictus to exophagy and exophily; (3) the exophagy and exophily of A. dithali and A. fluviatilis; (4) a 10-month transmission season in the south; (5) migration between the clean and the infected areas; (6) refusal of the inhabitants to accept malathion spraying because of its odour; (7) the short residual effect of malathion; and (8) the appearance of tolerance/resistance in A. stephensi to malathion, reported in 1975.

In 1976, owing to the high cost of manpower for national development projects, the High Scientific Council on Malaria had recommended the use of carbamate insecticides, as a result of which large-scale residual spraying trials using propoxur had been successfully carried out, and it had been decided to treat the infected south-eastern areas with that insecticide. Simultaneously, active and passive disease detection, radical cure, antilarval measures, and preventive drug administration had been introduced.

Thus Iran's malaria eradication programme, which had an annual budget of approximately \$ 40 million, had prevented the reinfestation of the clean areas, but would not be sufficient to maintain the status quo for long. Definitive antimalaria measures were therefore urgent to prevent interruption of socioeconomic development, and WHO had a vital role to play in promoting (1) development of effective and moderately priced insecticides; (2) establishment of production and formulation plant; (3) extensive use of new technology, e.g. ultra-low volume spraying; and (4) review of environmental management methods of vector control in water resource development projects. The Regional Office for the Eastern Mediterranean had recently organized a seminar on the subject in Alexandria.

The Iranian delegation supported the draft resolution as amended by the delegate of Ghana.

Dr FRESTA (Angola) said that the history of malaria in his country was long and painful. Present estimates were that malaria accounted for at least 53% of the morbidity. All the data presented during the discussion no doubt fell short of reality, for malaria was like an iceberg, only about 15% of which was visible: for instance, there had been cases of parasitaemia without clinical manifestations, and serious cases of the cerebral form without parasitaemia. Moreover, simple diagnostic methods that could be used by health centres were lacking.

Pilot antimalaria projects guided and supported by WHO and other organizations had twice been carried out. There was no available information on the first of those projects, but the second had shown that it was useless to take measures in a limited area, for the disease merely increased in the surrounding area. There was no country in Africa south of the Sahara where malaria had been completely eradicated, and the Anopheles could not be prevented from crossing frontiers. Thus WHO and all countries concerned - and even those not at present concerned - must join in a campaign against malaria and help to find an appropriate strategy for combating it.

Such a campaign must be worldwide and be launched immediately, without waiting for doctors to be trained, for the matter was urgent. Developing countries like Angola lacked the funds for such a campaign and found themselves increasing the incidence of malaria and schistosomiasis whenever they tried to build irrigation systems to grow the food they needed for an under-nourished population. Even sources of drinking-water, reservoirs of household water, small vegetable gardens and palm trees around a house, if not properly tended and supervised, became hotbeds of malaria. Neither state nor international aid was the answer to the problem, and all the available means of malaria control would be useless unless both individuals and communities throughout the world joined in a people's war on malaria.

Dr PHAM VAN GIAN (Viet Nam) said that in Viet Nam, a programme for the eradication of malaria had been started in 1959 and produced appreciable results. In 1976, the incidence of the disease had been 34 per 10 000 population in the north, as opposed to 64 per 10 000 in 1958. In the south, the situation was still very serious, owing to the war and the resulting internal migration, multiplication of carriers, and lack of health services. Ten million out of a population of 24 million lived in high-risk areas and 9 million in low-risk areas.

At the end of the war, the Government had resolved to intensify malaria control throughout the country and a national plan had been set on foot, including (1) development of implementation and supervision machinery at national and provincial level; (2) establishment and extension of a malaria control network comprising a central malariological institute, malaria control centres in provinces and urban areas, mobile health units in rural districts and malaria control offices in the community health centres of high-risk areas; (3) increase in the number of qualified personnel through training of malariologists, technicians and laboratory workers; (4) health education of the population to ensure its active participation in the programme; and (5) development of a technical plan covering: control of vectors and vector-breeding sites by chemical and traditional methods; prophylaxis and therapy including case-finding and radical treatment of confirmed cases; and research. Such research comprised epidemiological, clinical and parasite studies in each region with a view to developing effective and appropriate methods; studies to solve technical problems such as the exophily of vectors, resistance of mosquitos to DDT, resistance of strains to 4-aminoquinolines, special problems of malaria in coastal regions, etc. It also covered operational research and evaluation.

The delegation of Viet Nam was grateful to WHO and to the Soviet Union for their valuable aid. It hoped that WHO would cooperate closely with Viet Nam in research into the problem of resistance of vectors to DDT and resistance of strains to antimalarial drugs, in the hope that the results of such research would benefit countries with similar problems. The delegation of Viet Nam wished to be included in the list of sponsors of the draft resolution.

Professor KRANENDONK (Netherlands) said that his delegation was gravely concerned by the information given in the Director-General's report: it would wholeheartedly support the draft resolution on malaria control strategy. The reorientation of the malaria control programme could be achieved only through national commitment and international support.

Since malaria was increasingly being imported into the various countries, prompt detection and treatment were called for. In addition, the disease could be transmitted by blood donors during blood transfusion. Preventive measures in that respect had been discussed by the Council of Europe's Expert Committee for Blood Transfusion and Haematology.

Table 2 in document A31/19 constituted a useful guide to the selection, application and evaluation of control methods and the services responsible for them. However, the cost estimates for control measures given in Appendix 1 should be regarded as approximate, for the same method might have to be used up to 50 times a year. The importance of training in malaria could not be overstressed, and the master's degree courses given in Iran, Mexico and Nigeria were to be commended. While biomedical and applied field research into malaria should be encouraged, particularly in high-risk countries, all possible malaria control measures should immediately be taken to check the recent and continuing resurgence of malaria in all regions but one.

Dr BICA (Brazil) shared the concern at the gravity of malaria, especially in the Americas, and was gratified at the Organization's renewed interest in the problem and its expressed intention to devote to it the attention it deserved.

Malaria was an important public health problem in Brazil and, along with schistosomiasis, Chagas' disease, and the national immunization programme, was a priority of the Ministry of Health. The malaria eradication programme had encountered serious difficulties during the past decade, but from 1972, when it had been reoriented and began to receive the necessary financial support, fairly satisfactory results had been achieved. Transmission had been interrupted in large areas. Some regions were still in the attack phase, especially the Amazon basin, with its complex operational conditions. The eradication programme had been implemented in stages, starting with the most populated areas and leaving the operationally difficult regions until later. Of the 45 million inhabitants of endemic zones, 75% had been freed from transmission of the disease. Excluding Amazonia, the proportion was 80%. In only 13 of the 1471 infected municipalities was there still transmission. The traditional foci had thus been eliminated. Of 1.8 million slides examined in that area, only 0.4% had been found positive, the rate for the country as a whole being less than 1%. The results from Amazonia had been less encouraging after 1976, when the spraying of insecticides was suspended.

It was expected that malaria would have been eradicated from the greater part of the country by the end of the decade, except for Amazonia, where residual foci would continue

to exist. The Government was determined to eradicate malaria from the whole country, and was devoting the necessary financial and administrative support to that goal. The malaria eradication programme was an integral part of the national health programme.

Brazil therefore supported the draft resolution and asked to be included among its co-sponsors. It also supported WHO's directives for the reorientation of the malaria programme, contained in document WHA31/19.

Dr JOYCE (Ireland) recalled the euphoria that had attended the launching of the smallpox and malaria eradication programmes. The former had not presented as great a problem, and the programme had been successful. However, it had been thought by many, from the outset, that the strategy for malaria eradication was not the right one. Any money left over from the smallpox eradication programme should be diverted into research to develop a vaccine against malaria: the only ultimate solution.

Dr REID (United Kingdom of Great Britain and Northern Ireland) stated that his country would continue its active support for the antimalaria programme and would be interested in joining any consortium in support of a country programme that had the technical approval of WHO. The objectives set out in document A31/19 took into account the realities of the situation as regards malaria control strategy, and he supported the Director-General's proposals.

He could agree to the amendments to the draft resolution put forward by the delegations of Ghana, Iran, Mexico, and Mozambique except that, in the case of the last-mentioned amendment, he suggested that operative paragraph 8 should be extended to read:

"(8) . . . the activities of the Special Programme for Research and Training in Tropical Diseases, thus ensuring the quickest implementation of any new technology."

Furthermore, he had suggested to the Secretariat a few changes of individual words to improve the English version.

Dr ČAMOV (Bulgaria) said that he would submit his remarks in writing. He supported the draft resolution.

Dr HOWARD (United States of America) said that he had studied document A31/19 with WHO staff and with malariologists in his country. The situation as described in the document and by many delegates was grave. In response to that situation, the United States had budgeted over \$200 million in the last four years in support of malaria programmes in developing countries, and intended to continue its support in cooperation with WHO. He agreed with the United Kingdom delegate's statement on the same issue and endorsed the Director-General's new approach, which essentially advocated comprehensive vector and disease control methods. The Director-General had perhaps not been fair to himself or the WHO programme in the statement made in the first paragraph of the introduction to document A31/19, which gave the impression that the goal of the global eradication programme had been to achieve worldwide eradication of the disease during a time-limited period. However, the Director-General's report to the Twenty-second Health Assembly, to which that statement referred, had mentioned the impracticability of applying a time-limited programme to the whole world. Indeed, the Eighth World Health Assembly had recognized that

"there was no suggestion that malaria must be eradicated throughout the world within a specific period of time. The important point was that, once a campaign was started with DDT, it should be completed as soon as possible because the Anopheles might build up a resistance . . . Furthermore, it was realized that in Africa 'no large area had yet been cleared by the methods advocated by WHO and it was therefore impossible to plan for countrywide eradication with any assurance'" (Official Records No. 176, page 108).

Thus WHO's recommendations on malaria over the past years had been more flexible and realistic than had generally been appreciated - which confirmed that, as stated in the fourth preambular paragraph of the draft resolution, the recommendations of the Twenty-second Health Assembly had not been adequately implemented by Member States.

The need for training was an important aspect, and his delegation advocated the establishment of one or more centres for the training of interdisciplinary teams. His Government would

review with WHO the training needs in the South-East Asia and the Western Pacific Regions and was prepared to support the establishment of a regional training centre in that area, as well as senior-level training centres in other regions if required.

While the concept of the integration of antimalaria services into the general health services was appropriate as regards surveillance, chemoprophylaxis, and chemotherapy, there might be a need for specialized services to meet certain country-specific epidemiological problems.

The cost data on page 17 of document A31/19 required careful interpretation since, as presented, they were not comparable - e.g. larviciding might require 26 or more applications per year, whereas residual spraying might need to be done only once.

Stressing the need for research, he said that his country was supporting studies on the development of a vaccine. The first break-through in the in vitro growth of malaria parasites had been achieved at the Rockefeller Institute, New York.

He supported the draft resolution as amended.

Dr HOUENASSOU-HOUANGBE (Togo) said that malaria was public enemy No. 1 in Togo, since it was the primary cause of infant mortality and general morbidity. He commended WHO on the high quality of document A31/19, which was an excellent basis for the reorientation of malaria control. With the aid of WHO and other international organizations, the struggle against malaria might be reactivated. It had been observed in Togo for some time that an allergic type reaction affected certain individuals treated with antimalarials such as chloroquine. He wondered whether that phenomenon had arisen also in other countries.

He entirely supported the draft resolution, as amended, and particularly agreed with the amendment proposed by the Italian delegation.

Professor SOPRUNOV (Union of Soviet Socialist Republics) said that the Director-General's report presented a realistic analysis of the situation and of the proposed new strategy, and he agreed with the basic principles. Now that the malaria strategy had been reviewed, it was important that efforts should not slacken; on the contrary, the programme should receive increased support. The time factor was important: sometimes it seemed that malaria was outstripping control measures.

The first example: success in a malaria control programme had led to a degree of reassurance, so that the national epidemiological services required for malaria surveillance had not been established in time, and serious new epidemics occurred. There should now be no delay in taking preventive measures in southern Europe and the Balkans.

Secondly, it was regrettable that the change-over to the new strategy had taken several years.

Thirdly, in connexion with the emphasis on the implementation of national programmes, he asked to what extent WHO had helped in establishing and coordinating national programmes; what the prospects were for training malariologists over the next five years; and what contribution WHO was making to applied research on malaria epidemiology in the various regions. He had recently visited eleven countries in Africa; while he had been greatly impressed by the project in Benin (Nigeria), which would no doubt provide a great deal of useful information for the programme, the project in Kisumu (Kenya) seemed to have come to a standstill, and he did not know when the project in Ndola (Zambia) was to be implemented. It was to be hoped that universities and institutes in developing countries would pay more attention to practical epidemiological questions, which were so important for national programmes, rather than to theoretical research.

Fourthly, the time factor was vitally important, particularly with regard to the problem of resistance both in the vector and in parasite; the Special Programme for Research and Training in Tropical Diseases should pay special attention to that question. Soviet malariologists had had considerable experience in developing programmes, carrying out mass campaigns, assessing the potential risks of a recrudescence of malaria, and in consolidating the results achieved. A study of resistance was being carried out jointly by the USSR and Viet Nam. In such studies, it was extremely important to adopt a molecular approach, as the delegate of the German Democratic Republic had pointed out. Soviet malariologists did not wish to impose their concepts on anyone, but were prepared to share their experience, through WHO or bilateral cooperation.

He supported the draft resolution. However, he had noted that the words "speedy control" in operative paragraph 4(7) had been translated as "endiguer rapidement" in French and the equivalent of "rapid eradication" in Russian. He thought that the French version was the most appropriate, and hoped that the three versions would be made to reflect the idea of "containment" rather than control or eradication.

Professor ORHA (Romania) agreed on the need for political decisions and practical measures to prevent malaria from spreading again and regaining its previous level of endemicity. He believed, therefore, that WHO and the countries concerned should take advantage of the experience acquired by other countries. Thus, Romania had succeeded in eradicating malaria some 25-30 years previously in conditions resembling in many respects those of the developing countries currently struggling against the disease and its grave consequences. Though specialized bodies had been set up in the attack phase of the Romanian programme, antimalaria measures had subsequently been integrated into the routine activities of the national health services. Romania had succeeded in remaining free from malaria for over twenty years. On the basis of that experience, he suggested that greater attention should be paid to setting up flexible and mobile systems to ensure efficient epidemiological surveillance and to consolidate by repeated evaluation and appropriate measures the hard-won gains achieved. Romania was ready to place its experience at the disposal of malaria eradication, either through WHO or through bilateral or multilateral cooperation with developing countries in the field of basic and applied research into antimalarials, epidemiological surveillance, and training of health personnel by experienced malariologists.

He pledged his delegation's continuing support for the programme and expressed the hope that the implementation of the resolution on the new strategy would hasten the achievement of WHO's aim of "Health for all by the year 2000".

Dr TUCHINDA (Thailand) said that, in his country, malaria continued to be a major public health problem, since it had re-established itself at the former endemic level. Both technical and administrative problems had been encountered. There was evidence suggesting that A. minimus in one area was surviving exposure to DDT under test conditions, and that important vectors such as A. maculatus and A. balabacensis were becoming more tolerant to DDT. The behaviour of the main vectors had changed, which made it difficult to control the disease by insecticide spraying. Furthermore, the treatment of patients was being hampered by P. falciparum resistance to 4-aminoquinolines. Internal migration of the population was contributing to increased transmission of the disease, which could not be controlled. Owing to budgetary limitations, targets for coverage by spraying could not be met.

Through collaboration between WHO and the Thai Government, three international events of great importance in malaria research and training had taken place in Thailand during the past eight months: a training course in the technique of testing the sensitivity of P. falciparum to antimalarial drugs in vitro; a workshop on the continuous in vitro culture of P. falciparum; and a research study on the feasibility of adopting a new microtechnique for the detection and evaluation of drug-resistant strains of P. falciparum.

Thailand supported the programme and called upon WHO to intensify malaria research and training and on Member States to support those collaborative efforts. His delegation was glad to be one of the co-sponsors of the draft resolution before the Committee.

Dr SMITH (Nigeria) pointed out that malaria control was expensive and that few countries could afford it. More multilateral and bilateral cooperation, coordinated by WHO, was required if malaria was to be controlled rapidly. Since many countries had initiated basic health services, the prospects for malaria control were bright. WHO should intensify its technical aid for the training of personnel so as to ensure the expansion of current programmes.

Malaria remained a formidable public health problem in Nigeria, and concerted global and regional action was needed to achieve eradication. In the first phase of the Nigerian national malaria control programme, launched in November 1977, it was planned to cover 25 million people. It was hoped that 50 million would have been covered a year later; and that the third phase would ensure coverage of the entire population. The programme had included a series of workshops for medical and paramedical personnel, pilot projects to test the utilization of the available manpower and managerial capacity, and training for junior field personnel. Four types of course were being run for key personnel.

The resistance of P. falciparum had not been clearly demonstrated in Nigeria. A form of chloroquine, in which the bitter taste of the drug had been masked, was being produced locally and was acceptable to the population, except for certain cases where it caused itching in sensitive individuals. A study had shown 75% of the people tested to have that reaction, while 10% had gastric disorders. A combination of trimethoprim and sulfonamide was being used for individuals sensitive to chloroquine.

His delegation endorsed the research and training proposals but hoped that WHO would develop a new approach to malaria control, since little progress had been made in that direction. Cost/benefit analysis should always be a component of research, so that cheaper methods could be developed. The health education of policy makers, of those who implemented programmes, and of the general population would assist malaria control, especially in rural areas. Research into traditional remedies and more intensive research into a possible vaccine were desirable, though the introduction of a vaccine against malaria might still be a decade away.

Nigeria was grateful for WHO's cooperation in malaria control, and particularly in applied research. His delegation wished to be included among the co-sponsors of the draft resolution, as amended.

Dr ERNERT (Federal Republic of Germany) thought that the draft resolution should stress the need for priority decisions of governments and for cooperation. He therefore proposed that operative paragraph 2 should read:

"EMPHASIZES that it will not be possible to stop the dramatic recrudescence of malaria unless firm national commitments are made to combat it and adequate resources are devoted to antimalaria activities at the national and international levels".

Furthermore, he proposed that the addendum proposed by the Italian delegation should be shortened by terminating it after the words "for 1980-1981", since it might be difficult to reach universal agreement on what was meant by "adequate" resources from the regular budget and extrabudgetary sources. What was important was to give malaria control a higher priority when allocating budgetary resources. To say more would be to tie the Director-General's hands more than could fairly be expected, taking into account the other important tasks of WHO that also demanded increased resources. If his suggestion was not acceptable, a clear definition of what constituted "adequate" resource allocation would be needed.

The CHAIRMAN announced that Malaysia, Philippines, Peru, and the United Republic of Tanzania had asked to be included among the co-sponsors of the draft resolution.

Dr TOGBA (Liberia) recalled that malaria and smallpox had been the first two major diseases recommended for eradication. Smallpox had been eradicated first, thanks to a massive vaccination programme, whereas many obstacles lay in the way of malaria eradication. The disease could not be eradicated unless operations were on a more global scale than in the past. Liberia had been one of the first African countries in which WHO had undertaken a programme of malaria eradication, as far back as 1953-1955. The programme had been abandoned because of its cost and because neighbouring countries did not have similar programmes. He quoted paragraph 8.10 on page 87 of the biennial report of the Director-General (The work of WHO, 1976-1977), which read:

"In the African Region a programme covering the period 1978-83 was prepared with the principal objective of reducing mortality and morbidity. Feasibility studies will be conducted and eradication programmes undertaken in areas with adequate technical and financial resources."

He wondered how malaria could ever be eradicated in countries that did not possess the necessary technical knowledge, manpower, and financial resources. Only the more affluent African countries, such as Nigeria - which had already started an eradication programme and hoped to complete it by 1983 - could hope to eradicate the disease.

He agreed with the delegate of Ireland that emphasis should be placed on research into a vaccine that could control, and perhaps eradicate, malaria. Vector and disease control was expensive, and it was doubtful whether much could be accomplished unless a vaccine could be developed, by which both rich and poor could be reached.

The Liberian delegation asked to be included among the co-sponsors of the draft resolution as amended.

Dr LEPES (Director, Division of Malaria and other Parasitic Diseases), expressing his gratitude for the Committee's general support for the programme, noted that there was a wide measure of agreement on the malaria control strategy outlined in the Director-General's report.

In reply to Professor Spies, he explained that it was the effort, rather than the programme, that would be global. As with any problem of that magnitude, the global effort would include participation of all who could contribute to the solution of the problem.

As regards the emphasis on the epidemiological approach to control, he assured the delegates of the Soviet Union and of the German Democratic Republic that research to improve current knowledge of the parasites and vectors was not being overlooked. Basic research on malaria parasites was in progress, in such fields as biochemistry and molecular biology; biological membrane studies had been included to throw light on metabolite exchange and other phenomena closely connected with the mode of action of drugs and the mechanism of the resistance of P. falciparum to chloroquine. In view of the short time available in the Committee, he would be happy to provide further technical details to any interested delegate in private.

The importance of training had also been emphasized, although many national health services had ceased to provide it. Obviously young clinicians with no experience of malaria, particularly cerebral malaria, could not be expected to conduct the clinical management of such cases without further training in the form of seminars, or otherwise. As training was related to epidemiological research, and the coordination of operational research with the rest, courses had been held in Bangkok, and the South-East Asia and Western Pacific Regions now had enough people already trained to monitor P. falciparum resistance to 4-aminoquinolines. A further programme was being arranged for strain identification of P. falciparum to indicate the likelihood of this phenomenon spreading. In Asia this process seemed to have been slow during the past 20 years but could speed up depending upon the possible evolution of P. falciparum parasitism in that part of the world. It was very difficult to control the importation of a resistant strain of P. falciparum into other areas when it was not known how it happened. Strain identification was also closely linked with the biochemistry of the mosquito gut, where the parasite sporogonic cycle took place. Field studies had shown that a European vector, Anopheles atroparvus, which used to be an excellent vector of all three species of parasite, could not support the sporogony of P. falciparum from Africa. Whether A. gambiae would be able to support the sporogony of a resistant falciparum parasite from South-East Asia was not yet known. A cooperative effort would have to be made in the type of field studies required, which called for the collaboration of biochemists and specialists from other branches of the biological sciences.

On the question of control as against eradication, he said that control should not be regarded as renunciation of an effort towards eradication - such a dispiriting attitude would detract from all effort - but rather as a step towards eradication. In the ecological circumstances prevailing, countries should undertake whatever they could realistically achieve - which would range from mere reduction of morbidity and mortality to complete eradication, which was still sometimes possible in some areas.

As regards coordination within the Organization, and between WHO and the scientific community and Member States, he fully appreciated the need for such coordination and was convinced of the ability of the Organization to provide it from headquarters, where the same persons were working on both the operational and the research aspects of the programme and used experience of the one to enlighten the other. That facilitated prompt decisions on priorities for field research or for basic research to be carried out by the scientific community, and acted as a stimulus to the programme.

The natural regression of malaria in Europe since the seventeenth century had been slow and coincident with changes in human behaviour and improved living conditions separating man from animals. Two world wars had shown that progress could be arrested and so the regression needed to be backed up by existing technology.

He thanked the delegate of China for his very clear statement. No-one would disagree with the principles he had laid down.

Members of the Committee had mentioned the taste of chloroquine and a presumed side effect, pruritus, which had been recorded particularly in Nigeria, where up to 11% of those taking the drug were affected. Further observations, perhaps even studies, would be required to establish that chloroquine was responsible, since pruritis had not been commonly observed in patients receiving high doses - 600 to 800 mg a day continuously for several months - in the treatment of polyarthrititis or lupus erythematosus. It was logical to conclude that chloroquine per se was not responsible, especially where parasitic infections other than malaria were probably present and might be the cause of the pruritis, either alone or in association with chloroquine.

Dr HAMON (Director, Division of Vector Biology and Control) said that the programme of research on insecticides, which had been in progress for 15 years, with the participation of Member States, WHO and manufacturers, was probably nearing its end; it was tragic but true. Nearly 2000 preparations had been studied, but the rate of production of new molecules and of offers to WHO for testing had slowed down in recent years. In addition a marked difference had developed between the requirements of agriculture and those of public health, and the latter did not usually provide a sufficiently remunerative market to induce industry to undertake a development effort running into US\$ 10 million or so for each new insecticide. There were some countries for which there was no suitable insecticide available to replace DDT, malathion, fenitrothion and propoxur in cases of multiple resistance. The last, and only moderately promising, group - the synthetic pyrethroids - were being evaluated at the moment in northern Nigeria and Indonesia. If they did not give satisfactory results, it would be a long time before other methods of house spraying became available. Fortunately more chemicals could be considered for larviciding.

The alternatives to the chemical control of the vector were biological control, genetic control and environmental control.

Basic and operational research into biological control, through larvivorous fish and microorganisms pathogenic to vectors, had received considerable impetus during the past year or so from the Special Programme for Research and Training in Tropical Diseases. The use of larvivorous fish posed many operational problems, and microorganisms had to be subjected to thorough and expensive tests to establish their non-pathogenicity to man and non-target fauna. That was why progress had been so slow before the Special Programme started. Both methods would intervene at the larval stage and, with few exceptions, would not influence the survival of the adult mosquito. They would therefore have far less impact on the dynamics of transmission than house spraying and would require, on the part of the countries applying them, a considerable effort in mobilizing the community, and ensuring the personal discipline and health education of the public.

Where genetic control was concerned, a joint ambitious programme was in progress in Central America involving the United States of America and El Salvador. It had met with many operational difficulties even when the technical problems had been overcome, which showed the limitations of that approach.

As members of the Committee had often said during the discussion, agricultural and industrial development projects involving water resources management could entail a proliferation of vectors with consequent intensification of transmission. That was one of the fields where, under the WHO Special Programme and in cooperation with FAO and UNEP, it was hoped to develop activities. An integrated malaria control programme was being developed by the Regional Office for the Eastern Mediterranean in collaboration with the Government of Sudan, using all existing resources including environmental control and rational water management techniques. If that programme succeeded, it could serve as a training scheme and model for other countries. But it had to succeed first. The work would be costly and difficult, involving expensive operational research, and it was unlikely that any simple solution could ever be found. Certainly the application of all the new techniques combined to suit the epidemiological context would call for the employment of good epidemiologists, but it would also need good vector control experts, who were in very short supply. For that reason the regional offices had made a great effort to promote the establishment of centres for specialized training in medical entomology; negotiations were also in progress in Africa, South America, South-East Asia and the Western Pacific for the strengthening of regional, subregional and national training facilities in this field. The Special Programme was also playing an important role in strengthening existing institutions for that purpose.

WHO was doing its utmost to respond to the requirements of Member States but there should be no mistake: the situation was, and would remain, difficult.

Dr LADNYI (Assistant Director-General) referred to the comments of the delegate of Ghana and others on the structure of the core group on malaria. On behalf of the Director-General, he informed the Committee that the assessment of the functional structure of the Organization dealing with malaria was currently being studied and after discussions with the regional directors (which would probably take place the following week) an appropriate and constructive decision would be reached.

Dr FUJIGAKI (Mexico) recalled that his Government wished malaria control programmes to be reoriented towards eradication. He had proposed an amendment to that effect in the draft

resolution. For some reason that amendment had not been included in the addenda to the revised draft resolution but he hoped that it would be taken into consideration; and that his Government's position would be placed on record.

The CHAIRMAN assured delegates that all the amendments submitted would be put to the meeting and suggested that their discussion be postponed until the following meeting, by which time they would be available in writing.

It was so agreed.

Technical cooperation among developing countries: Item 2.6.18 of the Agenda.

The CHAIRMAN called upon the delegate of Mozambique to introduce a draft resolution.

Dr CABRAL (Mozambique) recalled the change in the relationship between the developing and the developed countries that was reflected in the replacement of "technical assistance" by "technical cooperation". The developing countries that had achieved the greatest success in their efforts were those that had cultivated self-reliance and refused foreign schemes and models. Among their achievements, those in health had not been the least and had proved of primary relevance, giving momentum to new ideas, such as primary health care and promotive medicine, that were recognized as valid alternatives even in affluent countries.

Since the countries of the Third World had the same social, economic and cultural problems, there was no better way for them to progress than by learning from each other. By cooperation among themselves developing countries would be able to avoid technological dependence, even if the more advanced technological devices of developed countries did, on occasion, prove to be adaptable to their conditions.

Bearing in mind the tremendous opportunities for cooperation on research, training, development and exchange of information between developing countries, the delegations of Cuba, Ghana, Guinea-Bissau, Panama, Sierra Leone, Yugoslavia and his own delegation proposed the following draft resolution, which dealt not only with the most important fields of operation, but also with the appropriate mechanisms for the coordination of that cooperation at different levels:

The Thirty-first World Health Assembly,

Bearing in mind the resolutions of the United Nations General Assembly and Economic and Social Council on the importance of the fullest possible economic and technical cooperation among developing countries;

Mindful that many developing countries, Member States of WHO, are developing and strengthening their programmes of health networks with the aim of attaining total population coverage in the shortest possible time that national conditions permit;

Recalling resolution WHA28.75 on technical cooperation with developing countries, and resolutions WHA28.76 and WHA29.48 on programme budget policy with regard to technical cooperation with developing countries;

Convinced that technical cooperation in developing countries is an important instrument for the technological liberation of developing countries particularly in the fields of research and development, training, and exchange of experience and information on health care;

Bearing in mind that health constitutes an integral component of the overall development programmes of the developing countries for which appropriate mechanisms of cooperation should be created at regional and interregional levels;

Realizing that the developing countries have attained a degree of development allowing the establishment of a profitable cooperation with mutual benefits;

1. INVITES the regional committees:

- (1) to discuss and/or reinforce at their 1978 sessions technical cooperation among developing countries for the promotion of health care, and
- (2) to set up appropriate regional and interregional mechanisms for developing and strengthening technical cooperation among developing countries in health;

2. URGES Member States, and in particular the developing countries:

- (1) to cooperate among themselves for the development of their national health services;
- (2) to collaborate actively within their regions in the establishment and effective use of national research and training centres;
- (3) to collaborate with WHO in the development and promotion of technical cooperation among developing countries and in ensuring support for its concretization;

3. REQUESTS the Director-General:

- (1) to strengthen WHO's programme of technical cooperation among developing countries;
- (2) to collaborate with the developing countries for the establishment and promotion of such cooperation;
- (3) to support in all possible ways, with the means at his disposal, the establishment and maintenance of the centres referred to in operative paragraph 2(2) above;
- (4) to attract extrabudgetary funds for the support of technical cooperation among developing countries on health projects;
- (5) to report to the Thirty-second World Health Assembly on progress made in this respect.

Dr PHILLIPS (Ghana) proposed that the fourth paragraph of the preamble should read: "Convinced that technical cooperation among developing countries is an important instrument . . ."; and that the indefinite article should be omitted in the second line of the sixth preambular paragraph before the words "profitable cooperation".

Dr CUMMING (Australia) strongly supported the draft resolution, proposing however an editorial amendment to the second preambular paragraph which might read: ". . . strengthening their health programmes with the aim of attaining total population coverage . . .". In operative paragraph 2(3) the word "concretization" might be replaced by "realization".

Dr SANKARAN (India), supporting the draft resolution, said that at the forthcoming Conference on Technical Cooperation among Developing Countries, to be held in Buenos Aires, and at the United Nations Conference on Science and Technology for Development, his country would offer its expertise and whatever material assistance it could to promote technical cooperation among developing countries.

Dr GALEGO PIMENTEL (Cuba) said that technical cooperation among developing countries was the cornerstone of whatever health management was possible for those countries. The programme delays due to the transfer of unsuitable technology, even with the best of intentions, had often been mentioned. The draft resolution also dealt with particular aspects of the forms that technical cooperation among developing countries might take and was, in that respect, more specific than previous resolutions on the subject. She therefore joined previous speakers in urging the Committee to approve it.

The CHAIRMAN announced that the delegations of Egypt and Nepal had indicated their wish to be included among the co-sponsors of the draft resolution.

Dr ACUÑA (Regional Director for the Americas), speaking on behalf of the Director-General, pointed out that a number of important predecessors to the draft resolution under discussion were not cited in the preamble. They were resolutions WHA30.43, EB60.R4 and EB61.R19. Members of the Committee would recall that the Director-General had submitted to the fifty-ninth session of the Executive Board in 1977 a proposal on technical cooperation among developing countries that had included modes of action and a definition of the term. The Executive Board at its sixtieth session had requested the regional committees to study the proposals and examine further ways of promoting technical cooperation among developing countries, which was the key to all WHO technical cooperation programmes.

Against that background the draft resolution, he suspected, merely repeated other previous resolutions. In his opinion it was in any case weaker. For instance, paragraph 3(1) of the

proposed resolution merely called for a strengthening of the relevant WHO programme, whereas resolution EB61.R19 reaffirmed that WHO's technical cooperation and services to governments should represent an integrated approach to the achievement of its constitutional objectives and requested the Director-General to report to the present Health Assembly on the implications for WHO of the restructuring of the economic and social sectors of the United Nations system. Again, resolution WHA30.43 clearly stated that WHO's target in the coming decades should be the attainment by all the citizens of the world by the year 2000 of a level of health that would permit them to lead a socially and economically productive life; called upon all countries urgently to collaborate in the achievement of that goal through the development of corresponding health policies and programmes at the national, regional and interregional level and the generation, mobilization and transfer of resources for health, so that they would become more equitably distributed, particularly among developing countries; and, finally, requested the Executive Board and the Director-General to pursue the reorientation of the work of WHO for the development of technical cooperation and transfer of resources for health in accordance with one of the Organization's most important functions as the directing and coordinating authority in international health work. In view of those considerations, he wondered whether the present draft resolution would serve any useful purpose.

Dr VENEDIKTOV (Union of Soviet Socialist Republics) recalled that his delegation had always supported technical cooperation between WHO and Member States, and among Member States regardless of their different social systems. The latter form of technical cooperation was particularly important in view of the benefits it could bring to the countries concerned. He proposed the addition, in the third preambular paragraph, after the mention of resolution WHA29.48, of a reference to resolutions WHA30.30, WHA30.43, EB60.R4 and EB61.R19, the rest of the paragraph remaining unchanged. The Director-General and the Executive Board could then review the whole situation and report to the Health Assembly on the progress made in implementing those resolutions.

Dr ERNERT (Federal Republic of Germany) wholeheartedly supported the developing countries in their desire to have the two forms of technical cooperation - among themselves, and with the Organization - become a reality. He noted however, in connexion with paragraph 3(4), that it had long been the Organization's practice to seek extrabudgetary funds for technical cooperation among developing countries on health projects. That had already been done on a bilateral basis for a long time.

Dr FIELD (United Kingdom of Great Britain and Northern Ireland) suggested that the phrase "technical cooperation with developing countries" in the first line of the third preambular paragraph should be deleted to avoid repetition.

Dr CABRAL (Mozambique) accepted those amendments.

Decision: The draft resolution, as amended, was approved.

Dr YANG Tsun-hsing (China) said that, while his delegation agreed in principle with the draft resolution, the reservations it had placed on record with regard to resolution WHA28.75 also applied to the citing of that resolution in the draft resolution just approved.

Education of people in community health: Item 2.6.18 of the Agenda

Dr GONZALEZ GALVEZ (Panama) said that his country, like so many other developing countries, had limited resources and many problems to face, in health as in other fields, and it could only face those problems if it made use of the rich potentialities provided by an educated and organized population. Health education should be carried out locally and systematically and be supported and coordinated by the national health service. In his country there were more than a thousand local health committees, which helped in such programmes as immunization and nutrition and in the improvement of agriculture and the general wellbeing. For that reason he was glad to introduce the following draft resolution, co-sponsored by the delegations of Angola, Belgium, Brazil, Cuba, Denmark, Finland, Honduras, Jamaica, Liberia, Mexico, Mozambique, Peru, Sao Tome and Principe, Trinidad and Tobago, the

United Kingdom of Great Britain and Northern Ireland, Venezuela, Yugoslavia and, of course, his own:

The Thirty-first World Health Assembly,

Bearing in mind that the effective participation of the community is indispensable to guarantee the development of health activities and the prevention and control of disease;

Realizing that health education of individuals, families and communities is essential to permit them to participate effectively in health promotion;

Aware that a number of countries are promoting programmes that foster active participation in health development, particularly through primary health care, as well as programmes for preparing health personnel with the necessary knowledge, skill and attitudes;

Noting that these countries have initiated activities for the creation and development of health education including, with some success, people's health courses through which people have access to valid information on health problems enabling them to take a greater interest in health activities and to participate in carrying them out;

1. INVITES Member States, and in particular developing countries:

- (1) to further develop their health education and establish people's health courses whenever appropriate with a view to fostering community participation in health development by a knowledgeable public;
- (2) to cooperate among themselves in sharing experiences on the planning, operation and evaluation of these activities;

2. INVITES the Director-General:

- (1) to collaborate with Member States, and in particular with developing countries, in creating and promoting health education activities, including various methods for community participation such as people's health courses whenever applicable, and in training health personnel in the principles, organization and techniques of educating the public in community health;
- (2) to support the establishment and development of health education activities with all the means at his disposal;
- (3) to attract extrabudgetary funds for the establishment and development of health education, including people's health courses.

Professor SULIANTI SAROSO (Indonesia) supported the draft resolution, the object of which was to promote participation in community health and make people aware of the importance of maintaining their own health. Some minor amendments were desirable, however. She proposed that the words "and in particular developing countries" should be omitted from the first line of operative paragraph 1, because there was also scope for developed Member States to do what the rest of the operative paragraph invited them to do. Operative paragraph 1(1) would be improved by the addition at the end of the words "and a positive attitude towards health". Operative paragraph 2(1) could with advantage be changed to read:

"to collaborate with Member States, in particular with developing countries, in the development of appropriate educational technology for the active participation of communities in health development and in the training of all health workers in the application of this technology".

Finally, the word "support" in operative paragraph 2(2) might be replaced by "promote"; and the words "with all the means at his disposal" be deleted.

Dr VENEDIKTOV (Union of Soviet Socialist Republics) also supported the draft resolution but suggested a few linguistic amendments to the Russian text that did not affect the other languages.

Dr CABRAL (Mozambique) said that health education of the people was an indispensable component of primary health care. The active and conscious participation of the people was

needed and should be based on their existing ideas and ways; they themselves must discuss their health problems and the solutions to them, so that excessively technical solutions were not imposed upon them. From the methodological point of view, too, there was much to be done in health education. He was therefore pleased to be one of the co-sponsors of the draft resolution.

Dr GALEGO PIMENTEL (Cuba), another co-sponsor of the draft resolution, stressed the importance of a basic knowledge of health for an improvement of community health. In her country there was considerable experience of health education of the community, an experience that it would be glad to share with other countries. Various approaches to community health education were possible according to socioeconomic conditions, but the approach adopted should suit local conditions and there should be supervision by the national health service so that the final aim should not be lost.

Professor ORHA (Romania) proposed that the words "starting at as early an age as possible" should be added after the word "appropriate" in operative paragraph 1(1).

Dr SANKARAN (India) thought that the Indonesian delegate's proposed addition of the words "and a positive attitude towards health" to operative paragraph 1(1) would be improved if the word "creating" was inserted before "a positive".

Dr YOO (Republic of Korea) supported the draft resolution, since no community health programme could succeed without the people's understanding and participation.

Dr RAMOS (Cape Verde) also supported the draft resolution.

The delegations of Egypt, India, the Republic of Korea, Nigeria, Rwanda and Sierra Leone requested that they should be added as co-sponsors of the draft resolution.

Dr GONZALEZ GALVEZ (Panama) said that none of the co-sponsors had any objection to the amendments proposed.

The CHAIRMAN put the amended draft resolution to the Committee.

Decision: The draft resolution as amended was approved.

The meeting rose at 12h40.

\* \* \*