SUB-COMMITTEE B

SUB-DEPARTMENT ON PROGRAMS

MINUTES OF THE SECOND MEETING

held at the Palais des Nations, Geneva, on Tuesday
29 September 1959, at 9.00 a.m.

CHAIRMEN: Dr. K. Zargarian (Iran)

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Present:

**Government**

France
- Dr. P. Faure
- Mlle. N. Tranquy

Iran
- Dr. M. Zomadian
- Dr. F. Hlabir

Israel
- Dr. S. Besh
- Dr. S. Syman

Italy
- Mr. P. Asian

**Secretariat**

Secretary to the Sub-Committee
- Dr. A.M. Taba, Regional Director

Representative of the Director-General
- Dr. P. Dorolle, Deputy Director-General

Deputy Secretary to the Sub-Committee
- Dr. A.Z. Halawani, Deputy Regional Director

Chief, Epidemiological and Statistical Section, ERO
- Dr. Hasfy Omar

Senior Regional Malaria Adviser, ERO
- Dr. M. Farid

Regional Environmental Sanitation Adviser, ERO
- Mr. G. Ponchis

Representatives of the United Nations and Technical Assistance Board

United Nations Division of Narcotic Drugs
- Mr. A.J. David

Technical assistance Board
- Mr. J.R. Symonds

Representatives of Non-Governmental Organizations

International Confederation of Midwives
- Miss H. Paillard

International Council of Nurses
- Miss H. Mussebaum

International Union of Architects
- Mr. W.F. Vetlor

Medical Women’s International Association
- Dr. V.J. Peterson
TECHNICAL MATTERS (Item 16 of the Agenda)

(f) The question of khat (Document EX/RC9/13)

The REGIONAL DIRECTOR stated that document EX/RC9/13 had been prepared in compliance with the resolution adopted by the Regional Committee at its eighth session and dealt with problems connected with the chewing of khat, the consideration given to the matter by international control organs and the preliminary analytical studies. Before khat could be classified as an addiction-producing drug subject to international control further extensive studies would be necessary. So far laboratory studies indicated that the main alkaloid contained in the leaves was d-norpseudoephedrine. He hoped to give more detailed information particularly about the use of khat in the Eastern Mediterranean Region at a later session of the Committee.

Dr DAVID (Narcotics Division, UN) speaking at the invitation of the Chairman, explained that the consideration of the question had been postponed by the United Nations Commission on Narcotic Drugs until WHO had completed its technical report. The Commission would then be able to decide what further action should be taken.

Dr ETESH (Israel) said that there was no large scale commercial production of khat in Israel where it had been introduced by immigrants from Yemen who grew it in their backyards for family use. Full information had been obtained as to where it was grown and in what quantities and it had been decided that no special control measures were called for. If, however, WHO's report indicated that control was necessary that would not be difficult.

Dr FAURE (France) said that although khat was not grown in French Somaliland it constituted a grave social problem because badly paid workers sometimes spent up to one-third of their earnings on it thereby depriving themselves and their families of food and paving the way for tuberculosis: hence the authorities in French Somaliland looked forward with great interest to WHO's report and conclusions.

The CHAIRMAN emphasized the effects which the use of khat might have on nutritional levels.
He suggested that the Sub-Committee adopt a draft resolution on the lines of that approved by Sub-Committee A.

It was so agreed.

(a) Malaria Eradication Programmes in the Eastern Mediterranean Region (Document E/RC9/4)

Dr FARIID (World Health Organization) introducing document E/RC9/4 stated that it summarized the efforts by governments in the Region to implement resolution WHA.30 and WHO's assistance through the Regional Office to national eradication services. Malaria was still a major problem in the region since it threatened 67 per cent (about 127 million) of its inhabitants and though in 1959 38 million had been protected by eradication or control measures 90 million still remained without protection.

Eradication programmes now covered Iran, Iraq, Israel, Jordan, Lebanon and Syria and preliminary surveys begun late in 1958 in Libya, Tunisia and Egypt were expected to be completed by the end of 1959. It was heartening that Pakistan where the problem was greatest, as well as Ethiopia, Saudi Arabia, Somalia and Sudan had already agreed to such surveys to start late in 1959 or early 1960, though a few countries and territories and they included Yemen, the Aden Protectorate and Persian Gulf territories, had not yet responded to the programme owing to local circumstances.

The success of campaigns of limited duration largely depended on efficient administration adapted to their special requirements and the need for administrative reforms and effective legislation could not be too strongly emphasized. The Regional Office was trying to help by offering the services of qualified administrators. Eradication programmes were regarded as an integral part of general public health activities and needed the collaboration not only of the whole medical profession but of the civilian administration and the public: hence the need for intensive health education.

Table V in the Report showed an encouraging increase in the number of trained personnel for which there would be yet a greater demand in countries changing over from control to eradication programmes since the techniques were different. That need
had been foreseen by governments and the Organization and the Malaria Institute in
Teheran, the WHO Regional Training Centre in Cairo, the Malaria Training Centre in
Ethiopia as well as fellowships granted for courses in Jamaica would all help in
training personnel. Assistance to them had been given a high priority by the Regional
Director.

The appearance of resistance by certain local vectors in specific areas to dieldrin
and DDT pointed to the urgent need for eradication programmes and further entomological
studies.

Another technical problem in the Region was the special ecology of the great
numbers of inhabitants leading a nomadic life. Iran was conducting research on
nomadism for which a grant had been given.

WHO, realizing that governments needed not only technical guidance but also supplies
transport and insecticides, had established effective co-ordination with other interested
bodies such as UNICEF and ICA whose continued support was a matter for gratification.
He also hoped that substantial assistance would be forthcoming from MESA but as the
fund’s financial position in 1960 was not as promising as anticipated and as the future
scope of WHO’s help depended upon substantial contributions, it was hoped that more and
more governments would continue to give their financial support. Otherwise the use of
the fund would be limited to the most vital projects which could not be financed from
elsewhere. MESA was designed to supplement and not to supplant resources derived from
the regular budget and the expanded programme of technical assistance. The Regional
Director, on behalf of the Director-General wished to take the opportunity of thanking the
Governments of Iraq, Israel, Lebanon, Libya, Saudi Arabia, Sudan and Tunisia for the
contributions already made to the fund.

In view of the need for inter-country co-ordination of programmes particularly in
frontier areas and for the expeditious exchange of information the Regional Director
was proposing to initiate an inter-country evaluation project to serve a group of
neighbouring countries.
The DEPUTY DIRECTOR-GENERAL outlining the financial position of WESA stated that the total income up to 25 September 1959 was £8 527 559, out of which eight million had been contributed by a single State, the thirty-three other Member States—allowance being made for interest and exchange losses—had only contributed some five hundred thousand dollars. Out of those thirty-three, nine came from the Eastern Mediterranean Region and three were represented in the present Sub-Committee.

The Director-General felt the position to be unsound. If contributions did not increase no expansion could be envisaged in 1960, and indeed the programme might have to be cut in that year. He therefore renewed his appeal to States for contributions or pledges for the not-too-distant future. It was regrettable that appeals to industry labour organizations and foundations had had but a negligible result.

Dr Besh (Israel) said that in Israel where a policy of eradication had been approved, the programme should be in full swing by the beginning of 1960. In 1958 there had been only twenty cases of malaria, 80 per cent of which had come from one region. Nevertheless there was some ground for concern because there had been sporadic outbreaks in areas where it had long been extinct. Sometimes they had been caused by therapeutic transfusions and after the strict regulations introduced three years previously had only occurred in hospitals where the rules had been ignored. In other instances there had been a relapse with patients who had come from malarious areas in other countries; those had been carefully studied to ensure that they had not been provoked by mosquitoes. The third category of cases was more disturbing because they indicated the existence of some small foci which might cause trouble owing to the presence of parasite carriers. They were trying to learn more about these carriers but it was difficult owing to the need for examining many thousands of slides. He hoped to give further information on that question at the next session.

The Ministry of Health in his country did not think it necessary to introduce any special legislation because of the co-operative attitude of the public and the recognition of the need for control by local authorities. In addition there were more
...doctors per head of population than in any other country in the Region and 70 per cent of the people were insured against sickness. Relatively frequent medical examinations made control possible.

His Government whole-heartedly supported the Regional Director's plan for an inter-country evaluation project.

He thanked the Deputy Director-General for his statement and undertook to bring the Director-General's appeal to the notice of his Government.

Dr. KABIR (Iran) emphasized the gravity of the problem of malaria in his country. In 1950 with WHO's help the Ministry of Health had launched a widespread campaign in rural districts and three years previously had started on an eradication programme in which ten million rials had been invested. He welcomed the Regional Director's evaluation project which was vitally necessary for the success of the campaign so as to establish whether the plan itself or its administration had to be modified.

Dr. FARID (World Health Organization), thanking Dr. Besh for his interesting remarks, said that the Regional Director looked forward to the time when the small existing foci in Israel would be eliminated. Israel was fortunate in having a comprehensive medical service and system of insurance and should be able to achieve eradication without difficulty.

The Regional Director felt that the team which would be conducting the evaluation survey would fill a long felt need. It was to operate in Iraq, Syria, Lebanon and the Jordan and would help to disseminate information on frontier areas. It was hoped that another team would later be working in Pakistan.

The CHAIRMAN suggested that the Committee approve a draft resolution on the lines of that adopted by Sub-Committee A.

It was so agreed.
Smallpox control (Documents E/R8/5 and Add.1)

Dr OW (World Health Organization) introducing the report on smallpox control said that the main problems in endemic areas, and the disease was endemic in at least six countries and territories of the Region, were to ensure that the vaccine was potent and to organize effective vaccination which on a mass scale was regarded as the best method of control. If 80 per cent of the people were vaccinated successfully, eradication was ensured and any outbreaks could be easily arrested.

Another problem in the Region was that the disease was sometimes brought in from outside and that there were no quarantine barriers between countries of the Region and adjacent ones. In the previous three years many such cases had occurred and had created new foci.

In pursuance of the decision by the Eleventh World Health Assembly the Regional Committee had called upon Member States to provide information enabling the Director-General to carry out his study of the financial, administrative and technical implications of the Assembly's resolution. The useful information supplied had been tabulated in Section IV, Part 1 of the Report from which it would be seen that in certain urban areas a high proportion of the population had been successfully vaccinated and there had been no difficulty in persuading people to accept it. It had also been ascertained that vaccination services existed almost everywhere though there was no permanent body of vaccinators. In most countries trained personnel could be brought together fairly quickly or training courses arranged. Little information about costs had been received apart from Iran.

Fourteen countries in the Region had laboratories producing lymph vaccine and others imported their supplies. Information about production and imports could be found on pages 10 and 11.

WHO had already published a report based on information from various countries in the world on the organization of a smallpox eradication service and this document would be circulated to all interested States. The Regional Director had already arranged fo
a team to survey the position in certain areas and to advise governments on methods of control. After visiting four countries it had already been established that although legislation on control was more or less universal it was sometimes not enforced, particularly in rural areas.

Section V, Part 4 in the Report indicated the present criterion for successful vaccination and gave details about the properties of freeze-dried vaccine which was considered to give the best results in remote rural areas.

The Regional Director wished to draw special attention to the operative paragraphs of the resolution adopted by Sub-Committee A and to emphasize that the full co-operation of Governments was essential if eradication were to be achieved.

Dr SYIYAN (Israel) thanked Dr Omar for his interesting remarks. In Israel smallpox was not a major problem though the authorities by no means minimized the importance of routine measures and regional control. During the past decade there had not been a single case and vaccination procedures were regarded as satisfactory since more than 60 per cent of the population was covered and the proportion was higher for infants because responsibility for vaccination had been transferred to HCH centres which serviced the whole country. There was therefore no special problem of control in rural areas. An additional guarantee was that on admission to school children had to present a certificate of re-vaccination and all new immigrants had to be vaccinated. In the circumstances there was no need for mass campaigns which could not easily be conducted without special personnel. There had been practically no instances of objection to vaccination on religious grounds.

Israel did not produce freeze-dried vaccine because the existence of proper transport and refrigeration facilities made that unnecessary.

Recognizing the potential importance of smallpox his Delegation endorsed the proposals concerning eradication and supported the resolution adopted by Sub-Committee A.
Dr. FAURE (France) said that although there had been no cases of smallpox during the past ten years in French Somaliland and in spite of the routine vaccination of practically the whole sedentary population every three years, a potential danger did exist among monadic tribes who frequently escaped vaccination and more particularly during their movement across frontiers.

Dr. HAKIM (Iran) said that in spite of certain difficulties 80 per cent of the population in Iran had now been vaccinated.

The CHAIRMAN observed that the difficulty in using freeze-dried vaccine was its relatively high cost. Research was in progress at the Teheran Institute to evolve a cheaper product; such work could be very beneficial to other countries in the Region and deserved support.

Dr. OLAR (World Health Organization) agreed that in Israel there was no need for mass campaigns. The information contained in the report about religious objections to vaccination derived from the answers supplied by governments to the Director-General's questionnaire.

Nomadism presented a public health problem in all African countries and caused difficulties in achieving comprehensive vaccination. Outbreaks of smallpox in recent years had also been traced to the movement of pilgrims across frontiers. If simultaneous campaigns could be conducted in adjacent states progress towards eradication could be made.

The Regional Director welcomed the information about the campaign in Iran.

He agreed with the Chairman on the need to devise a cheaper vaccine than that prepared by the Lister Institute technique.

The CHAIRMAN suggested that the Sub-Committee approve a similar draft resolution to that adopted by Sub-Committee A.

It was so agreed.
The REGIONAL DIRECTOR stated that document E4/RC9/6 provided a comprehensive review of the nutrition situation in the Region: a field in which WHO was collaborating closely with UNICEF and FAO. Nutrition was gaining in importance with the rapid growth of population due to improved health conditions. The main emphasis in the paper was on training and it sought to draw the attention of governments to the need for preliminary surveys before embarking on measures to improve nutrition.

Dr SYUN (Israel) thanked the Regional Director for his valuable initiative in focusing attention on the fundamental problem of nutrition and hoped that all Member countries would make a determined effort to effect improvements. The paper constituted a first step in assessing the problem and he welcomed the appointment to the Regional Office of an adviser on nutrition.

Social factors largely determined the level of nutrition and unfortunately considerations not connected with health sometimes influenced food policy. He wholeheartedly subscribed to the statement contained in the fourth paragraph of the introduction which usefully brought the fact that health services were not always in a position to give a lead.

At one period there had been severe rationing in Israel but sustained efforts had been made to ensure a well-balanced diet and an adequate intake of calories. Though rationing had now ceased the Government still continued to subsidize certain basic foodstuffs such as milk and bread so as to ensure that the poor were adequately fed. In addition some foodstuffs such as margarine and flour had been enriched and surveys had demonstrated that that move had eliminated certain dietetic deficiencies. However, some persisted partly as a result of the prejudice, ignorance and cooking habits of certain groups of the population and notably among immigrants.

A survey was being conducted with UNICEF assistance on nutrition levels, the second part of which would be devoted to clinical investigations on protein and anaemia deficiencies. Such subjects required a great deal of research and his Delegation had consequently been interested in the activities suggested in the Report.
The authorities in his country were giving special attention to particularly vulnerable groups in the population such as pregnant women, infants and children. Advice and help could be easily provided owing to the extensive medical services under whose care they came.

Dr. FAURE (France) said he had little to add to Dr. Syman's comments. He merely wished to say how much he agreed on the importance of health education in nutrition, particularly in certain areas where food habits, and sometimes religious principles prevented populations from using readily available and abundant food supplies badly needed to maintain health. That was the case in French Somaliland where protein deficiencies, predisposing to tuberculosis, which was a major problem there, were found in populations living in the vicinity of an abundant and readily accessible fish supply. The increase of the protein content of the diet demanded a break with tradition which had to be brought about by health education.

Decision: The Sub-Committee adopted a resolution along the lines of resolution E2/RC94/R.7.

(d) Community water supplies in countries of the Eastern Mediterranean Region

(Document E2/RC97)

Dr. FONGHIS, (World Health Organization) introducing the document, pointed out that it dealt with problems of great concern to the Region.

The introduction briefly recorded the importance of water, not only to the physical existence of man but to his social and economic condition, stressing that the water supply should not only be pure but also abundant and accessible.

The paper went on to call attention to certain general data on the provision of water in the area. There were several reasons for the failure to provide adequate water so far (page 11 of the document) but none finally eliminated the possibility, and the first guarantee of ultimate success was the desire of all people for a pure, adequate and accessible water supply.
Part IV contained an account of the programme for community water supplies, starting with a paragraph on the role of WHO and other international bilateral agencies and including a list of multi-phased activities of WHO at various levels (pages 12-13). It was hoped that the establishment of a special account to provide assistance to Governments in the development of community water supplies (WHA12.48) would give the programme new impetus. It was also hoped that help would be available from outside sources though self-help was the keystone to future, lasting success (page 13).

The first need was for a survey of existing conditions (page 14) prior to the development of a detailed programme. However, a start had already been made as indicated in Part V, paragraph 1, pending the preparation of a wider programme; proposals for future activities followed in paragraph 2.

In conclusion he asked representatives to the Sub-Committee to regard the proposals emanating from Headquarters for the world-wide improvement of environmental sanitation - including community water supplies - as a stimulus to additional work and not as a substitute for it.

Dr SELLAN (Israel) observed the importance of water supplies in the entire Eastern Mediterranean Region. In Israel, water was basic to development. However, his country was in a slightly different position from other countries of the Region in that 75 per cent of all households were supplied with a safe piped water supply; consumption was high, (275 litres per capita per day). All city water supplies and some rural supplies were chlorinated and subject to regular bacteriological analysis. Water had long ceased to be a factor in the transmission of disease, there having been no outbreak of waterborne disease for the past eleven years.

In that connexion, he wished to criticise the statistics in Tables II and III. The relatively high death rate in Israel from intestinal diseases among children under five years, and the number of typhoid cases since 1955, none of which were fatal (the table was inaccurate in showing 10 deaths) did not point to inadequacies of the water
supply, which as he had explained was very good, and no longer a factor in the transmission of disease. The high incidence of enteric disorders in Israel was due to deficiencies in food handling and climatic factors.

It was important that the Health Administration should play a leading role in the definition of water supply policies. In Israel the Ministry of Health had to approve all new water systems, supervise existing systems and define policy. More surface water was gradually being used which made even greater vigilance necessary.

In another field of environmental sanitation - sewage disposal - central guidance was also important. There too the Ministry was taking part in the national co-ordination of sewage disposal work. Much remained to be done both to extend hygienic methods of disposal and to maintain existing disposal systems which tended to break down when urban centres expanded too rapidly. Financial problems and problems of high cost of processing plants to enable sewage to be used with safety were gradually being solved in several parts of the country.

The National Water Plan had given the Administration the experience in exploring the use of water resources of all kinds, so that his Government was in a position to make assistance available to any countries in the Region willing to accept it. Assistance would be provided in the loan of trained technical personnel, including hydrologists and water engineers; training of water supply, irrigation and sanitary engineers, which could be provided at the Institute of Technology and followed by a period of practical training in the field; short courses for qualified personnel; loan of experts in water supply and water resources development and help with surveys and development on the spot.

The CHAIRMAN thanked Dr Syman for his offer of assistance. All members of the Sub-Committee were pleased to hear of the progress made in Israel.

Mr PONGHIS thanked Dr Syman for his comments. The Regional Office had noted with pleasure his offer of aid.
In connexion with the statistical tables, he explained that, as the document indicated in Part II, the statistics were merely indicative of trends, and could not of course be related to water purity alone. It should also be linked with the question of abundance of supplies.

Decision: The Sub-Committee then adopted a resolution along the lines of resolution EM/RC9A/B.8.

(e) Ionizing radiation in medicine and public health (Document EM/RC9/8)

Dr El HALAWANI, Deputy Regional Director, introducing the document said that its object was to call the attention of health administrations in the Region to the public health hazards of ionizing radiation.

The introduction consisted of a preliminary tribute to the discoverers of the two main sources of ionizing radiation - X-rays by Roentgen and radio-activity in uranium salts by Becquerel, followed by an account of the use made of their discoveries and steps taken to protect the public until the discovery, in 1939, of nuclear fission, opened a new era of increased hazards to all populations as a result of the contamination of their environment, discharge of radio-active waste, use of X-rays and radio-active isotopes in industry and medicine. The first steps to deal with the new situation at the international level were then outlined. Part II dealt in paragraph 1 with the somatic effects of radiation. The difference between total and partial exposure were widely known. The median lethal dose was 300-500 rad, the most sensitive parts of the body being the blood forming organs, and the intestinal tract, particularly the mucous membranes. The main characteristics of radiation sickness were then enumerated.

The main lines on which present day research and treatment were proceeding were the grafting of bone marrow combined with antibiotic treatment to compensate for the failure of the organism's immunological functions. The after effects of irradiation were often considerably delayed and frequently took the form of malignant bone tumours. Total irradiation generally resulted in leukaemia as had been seen on the sites of the
first atomic explosions, in Japan. The document mentioned radiostrontium and caesium 137 among the sources of ionizing radiation. Both were long-lived and bone-seeking.

The prevailing view, although it had been changed recently, was that the genetic effects of radiation, dealt with in paragraph 2, differed from the somatic effect in that they followed a linear curve. Somatic effects required a threshold dose, whereas any dose seemed likely to produce genetic effects. For that reason genetic effects were most important and much research work on the subject was in progress in various parts of the world. The difficulty was to find an acceptable yardstick by which to measure the effects attributable to modern hazards. The biometrical effects of ionizing radiations were at present largely a matter of speculation.

An analysis of the sources of ionizing radiation followed in paragraph 3. There were natural internal and natural external sources. The latter varied from area to area and were being studied both in research institutes all over the world and by WHO as indicated later in the paper. The second group of sources were the man-made sources listed in the document. The different types of fall-out effects were enumerated and described in Annex II from which it appeared that fall-out from the troposphere was less important than the fall-out from the stratosphere which affected the northern more than the southern hemisphere.

Part II, paragraph 4, dealt with medical uses of radio-active isotopes, a fifth paragraph with occupational exposure, and a sixth with radio-active waste disposal which was for the most part a hazard of the future, as the paragraph indicated. Special study of methods of disposal and permissible quantities would be necessary and should be carried out with the assistance of oceanographers.

Part III, on nuclear energy and public health, emphasized the necessity for organizing theory courses and practical experiments and demonstrations in nuclear physics. They would call for collaboration between physics laboratories and medical schools. The Regional Office had already delegated a short-term consultant to tour the Region. He had reported the interesting manner in which radiation instruction had been incorporated in the medical curriculum in Iraq.
The second paragraph dealt with the information of the public, new tasks devolving on the public health services and the health education responsibilities of health personnel including nurses.

The activities of WHO were listed in Part IV in seven paragraphs. He called the Sub-Committee's particular attention to the paragraph on the 1958 visit of a short-term consultant to four countries in the Region and the follow-up work to be done in 1959 (paragraph 4), to the provision of fellowships (paragraph 5) and to the work of the joint WHO/FAO Expert Committee on Radiochemical methods of analysis (paragraph 6).

Part V described the relationship of WHO with other international organizations.
Part VI listed the number of WHO, EREO fellowships awarded between 1952 and 1959.
Part VII contained more details about the joint WHO/FAO Expert Committee and its very important report.
Part VIII gave details of the questionnaire which had elicited much information of interest to countries desiring to amend or enact laws and regulations on radiological protection.

Dr SYLAN (Israel) thanked the Regional Office for a document covering all the essential aspects of the subject in a readily understandable form. It was difficult to find reliable information because textbooks on the subject were rapidly dated or over-scientific. His Government would make good use of the document and might even have it distributed to public health workers. He also congratulated the Deputy Regional Director on his illuminating comments.

In Israel, radiation hazards had reached the stage where protection had to be provided not only for technical personnel exposed to irradiation but also for the public.

The medical profession was becoming more and more conscious of the danger of the indiscriminate use of X-rays and was restricting X-ray diagnosis and treatment to cases where they were absolutely indispensable, taking care not to expose pregnant women or children. The Ministry of Health was bearing in mind the possible dangers
of mass-radiography as used for the diagnosis of tuberculosis, and was doubtful whether it should continue its intensive programme for the treatment of ringworm of the scalp by irradiation. The Regional Office might usefully consider initiating a project to evolve a different treatment, possibly by oral drugs. The radiation specialists had formed a special organization contributing to the protection of the public. Radio isotopes were being more and more widely used in clinical work which was proceeding in three centres. The Ministry of Health was concerned about the possible harmful effects of the treatment being provided. A leukaeida register had been set up in an attempt to relate cause and effect by statistical methods. In those matters modern developments were gradually being introduced into the thinking of the medical profession. New legislation for the protection of the community against ionizing radiation was being prepared and would be transmitted to WHO in due course.

He strongly urged WHO to pursue its efforts to resolve the uncertainty about the permissible dose of radiation, possibly with the assistance of the International Atomic Energy Agency, with a view to determining international standards and regulations. For the time being, his country was using what data was available from the Organization and leads provided by the United States Atomic Energy Commission.

In regard to training, Israel had received fellowships from the Regional Office to enable a sanitary engineer and an X-ray specialist to attend short courses. It would be most useful if the Regional Office could help with the complete training of a public health physicist whose services were rapidly becoming essential.

He had welcomed the information regarding the training of health personnel in matters of radiation and agreed that more information should be included in the medical curriculum. Some steps had been taken in that direction at the University of Jerusalem. He had been pleased to hear that the Iraqi medical curriculum was so complete in that respect. It would be particularly useful for engineers to be better instructed in such matters. He fully agreed with the Deputy Regional General on the necessity of instructing auxiliary health personnel in radiation protection, but
considered that those in direct contact with the public should not be given such instruction in too much detail, at least until more agreement had been reached at the specialist level.

The DEPUTY REGIONAL DIRECTOR said that the Regional Office was aware of the problem of finding alternative treatment for ringworm of the scalp and, in view of progress in medical mycology, was advising against irradiation of the scalp in favour of oral drugs.

The increase in leukaemia had been observed in many parts of the world, especially among children whose mothers had been exposed to X-rays during pregnancy. The disease was undoubtedly on the increase but it was not clear whether the increase was due to irradiation. The subject was being studied in several countries.

The Organization's suggestions on legislation were based on present knowledge of the permissible dose. Both the International Commission on Radiological Protection and the International Commission on Radiological Units and Measurements were working on the problem and the resulting recommendations should be accepted for a start, until more accurate knowledge became available.

On the question of public information, he fully agreed with Dr Syman on the desirability of preventing panic among the population and it was for that reason that the suggestion was that nurses should be given the real facts.

The CHAIRMAN suggested that the Sub-Committee might wish to adopt a resolution along the lines of resolution E/109A/10.

Dr BTESH (Israel) pointed out that, as the only item on the Agenda of the Sub-Committee was ionizing radiation in medicine and public health, that was the only kind of resolution it could adopt. The Sub-Committee had not dealt with any other aspects of ionizing radiation.
The CHAIRMAN assured Dr Btesh that his statement would be recorded and taken into account in drafting the Report.

Decision: The Sub-Committee adopted a resolution along the lines of resolution EM/RC9A/R.10.

The Sub-Division on Programme ended its meeting at 11.45 a.m.