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TOWARDS HEALTH FOR ALL BY
THE YEAR 2000 IN THE EASTERN
MEDITERRANEAN REGION OF
THE WORLD HEALTH
ORGANIZATION

تَحْقِيقُ الصِّحَّةِ لِلْجَمِيعِ بِمَجْلُولِ عَامِ ٢٠٠٠
فِي الْإِثْنِ مِيقَاتِ الصِّحَّةِ الْعَالَمِيَّةِ لَشَرْقِ
الْبَحْرِ الْأَبْيَضِ الْمَتَوَسِّطِ

VERS LA SANTÉ POUR TOUS EN
L'AN 2000 DANS LA RÉGION DE
LA MÉDITERRANÉE ORIENTALE
DE L'ORGANISATION MONDIALE
DE LA SANTÉ

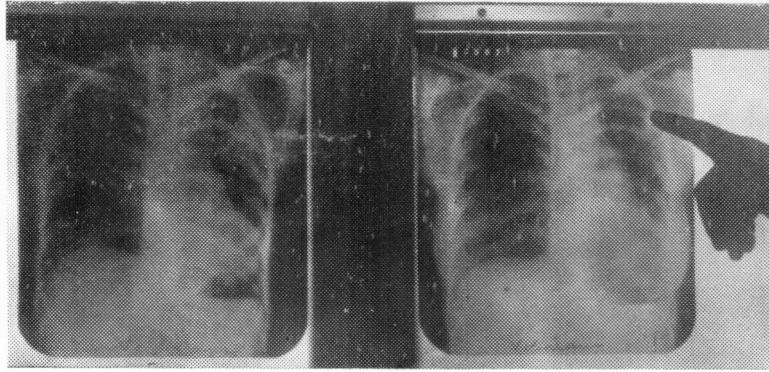
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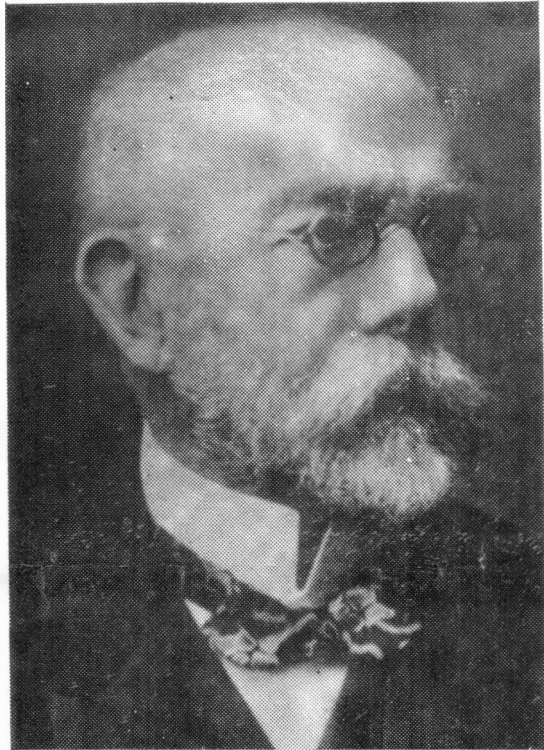
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CENTENARY OF ROBERT KOCH'S DISCOVERY OF THE TUBERCULOSIS BACILLUS

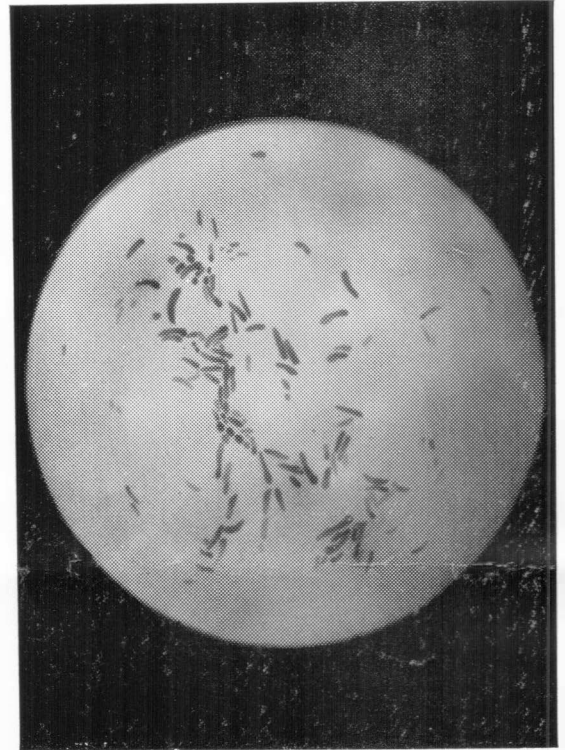


*The tell-tale shadow
on a tuberculous lung
is revealed by X-ray*



Robert Koch (1843 - 1910)

Urban slums generate tuberculosis



tubercle bacilli under the microscope

Afghans lining up for TB treatment



24 MARCH 1982, CENTENARY OF ROBERT KOCH'S DISCOVERY OF THE TUBERCULOSIS BACILLUS

THE MARCH OF PROGRESS AGAINST TUBERCULOSIS

Traces of tuberculosis lesions have been found on 3000-year old Egyptian mummies.

- 1882: German physician Robert Koch announces his discovery of the tubercle bacillus on 24 March.
- 1890: Koch produces tuberculin, an extract of dead tubercle bacilli, used as a diagnostic test of tuberculous infection. The large-scale use of tuberculin test made it possible to measure the extent of infection throughout the world.
- 1895: Roentgen discovers the X-rays which allow an examination of the chest. Mass radiography was once popular, but it is not recommended today. It proved to be a costly and inefficient case-finding method. It is bacteriological examination of the sputum which results in actual confirmation of the diagnosis.
- 1921: French scientists A. Calmette and C. Guérin discover BCG, an attenuated form of the bovine bacillus, as vaccination against tuberculosis. BCG stands for Bacillus Calmette-Guérin. BCG vaccine protects children against tuberculosis. It costs between two and five US cents per dose, and when freeze-dried remains stable for one month at room temperature even in hot tropical climates.
- 1944: Streptomycin, the first antibiotic effective against TB, is discovered in the USA.
- 1946-1952: New drugs appear, namely para-aminosalicylic acid (PAS) and isoniazid (INH). These drugs are highly effective and very cheap.
- 1956-1960: Many studies show that domiciliary treatment is as effective as sanatorium treatment. What is essential is that the patient should be absolutely regular in taking his tablets. Henceforth, the fight against tuberculosis no longer depends on the number of hospital beds available.
- 1964: A twice-weekly drug treatment is introduced, in place of the daily regimen. This makes complete, direct supervision of treatment much easier.
- 1966: Rifampicin proves to be an excellent drug against TB and makes it possible, as well as pyrazinamide, to reduce the duration of treatment. Because patients tend to stop self-administering their drugs once they are feeling better, new drugs which need only be taken over a six-month period (instead of one year) represent a great advance in chemotherapy.

A REVIEW OF THE TUBERCULOSIS SITUATION IN THE EASTERN MEDITERRANEAN REGION

Tuberculosis as a "killer" has been known from time immemorial in the WHO Eastern Mediterranean Region. The Egyptian, Greek, Arab, Persian and Ayurvedic doctors recognized the symptoms and were aware of the often fatal course of the disease. After Koch discovered the TB bacillus in 1882, the infectious nature of the disease was confirmed. However, no treatment was available and only contagion could be avoided.

Organized efforts for the control of the disease started in the countries of the Region with isolation of the patients and improvement of their living conditions, particularly their diet. Special TB institutions (sanatoria) were established in several countries as early as the 1920s and the 1930s. All over the years, health services endeavoured to bring anti-TB care as close as possible to the population, chronologically first as a result of the discovery of the BCG vaccine, then of effective drugs and of the policy of ambulatory or domiciliary treatment of patients.

Still a major health problem

TB continues to be one of the major public health problems in several countries. In some of them the situation has been gradually improving, while in others it is still serious and calls for continued efforts.

Epidemiological studies based on tuberculin testing (see box), X-ray and sputum examination were carried out in most countries in the 1950s and 1960s. Since the 1950s, WHO has collaborated with almost all countries in controlling TB, with emphasis on surveys to assess the magnitude of the problem, BCG vaccination of children, and the establishment of national control programmes, including training and fellowships.

Population coverage with anti-TB services in the Region varies from 30 to 100 per cent. In countries with an adequate health infrastructure such as Bahrain, Cyprus, Israel, Kuwait, Libya and Qatar, comprehensive anti-TB services are provided to everybody, whereas in these countries with larger population and less developed infrastructure, anti-TB activities are being gradually integrated and tied up with the development of basic health services, especially primary health care (PHC).

Anti-TB activities

Preventive and curative activities carried out at the level of the public, both urban and rural, vary from one country to another. The most common practices are:

- BCG vaccination of newborns and infants as part of the Expanded Programme on Immunization (EPI);
- Detection of cases among attendants at hospital out-patients departments, mainly through microscope examination of sputum;
- Ambulatory treatment of cases, on-the-spot and at home.

In addition to integrated services at the level of the community, special TB centres, often established with WHO collaboration, and hospitals with beds for TB patients, wherever they exist, have continued to function as specialized institutions, caring for the new patients and those referred from general hospitals and health centres. New sanatoria and TB hospitals are no longer built.

Two main problems

Case finding and follow up of patients are the two main problems encountered in the fight against TB. Whereas miniature X-ray examination, often carried out by mobile teams, was very popular as a detection tool in the beginning, mainly for the sake of technology and prestige, this practice is now considered as not efficient enough and above all too costly. It has been replaced by microscope examination of the sputum of persons who present persistent cough symptoms, loss of weight, or fever. However, facilities for sputum culture are not available everywhere. It can also be said that only people who present themselves to hospitals or health centres are actually examined, without consideration for the rest of the community.

As the treatment has to be absolutely regular to be effective, which means that the patients have to take their medicines in the prescribed doses over a period of six to twelve months, the tracing and follow up of defaulters is a must for the success of any programme. In many countries, however, the problem of defaulters is great and actions taken for their follow up are unsatisfactory because of the lack of health personnel.

Nevertheless, with the advent of new anti-TB drugs and new regimens for treatment, it is hoped that the problem of defaulters will be minimized.

Treatment

A large range of anti-TB drugs, including antibiotics, are being used for treatment of TB patients in countries of the Region. The two most commonly used are streptomycin and isoniazid (INH), usually available free of charge in governmental health services.

Most countries are more or less following the same scheme of treatment, established by WHO, and divided in two phases: an initial intensive phase of two to three and sometimes four months, followed by a consolidation phase. In some countries, particularly those with adequate facilities, patients are generally hospitalized during the initial treatment. In other countries where hospital beds for TB patients are limited, initial treatment is in general ambulatory. In the majority of cases, ambulatory treatment is self-administered and, especially during the second phase, not supervised (no follow up). This, of course, is due to the lack of health staff in sufficient numbers. A follow up system should therefore be set up for those patients who neglect their treatment, thus building up cases of resistance of the bacillus to the drug used and spreading drug-resistant germs to other people.

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BCG vaccination

Almost all countries of the Region have had mass BCG campaigns and millions of children have thus been vaccinated. In the last few years, BCG vaccination was integrated with the Expanded Programme on Immunization (EPI), emphasis being given to immunization of the newborns and infants below one year of age. In general, BCG vaccination is developing well and coverage is reaching a satisfactory level.

Freeze-dried vaccines have been introduced almost everywhere, thus avoiding the difficult problem of cold chain. At present, three countries of the Region are producing their own vaccines, which are of comparable quality to international standards.

Training of personnel

Since the 1950s, training of health personnel has been an integral part of WHO's collaborating programme for TB control. WHO activities included the establishment of TB control demonstration and training centres at national level, as well as fellowships for training abroad. The number of persons trained through these programmes is quite substantial.

The training in TB control of primary health care (PHC) workers is receiving attention in some countries, but it is still too early to assess the impact of such training on the role that PHC can play in TB control activities.

In the future, community health workers should be able to pass from passive to active surveillance, that is not only examination of persons showing symptoms and seeking treatment, but also active case finding among apparently healthy populations.

Some countries, especially those using large expatriate labour force coming from areas where TB is highly endemic, proceed to radiological examination of all those seeking labour entering these countries.

Obstacles

The obstacles to the development of an effective and integrated programme most frequently encountered are shortage of staff and difficulties due to the long period of treatment necessary to cure TB and the need for follow up, especially of defaulters. There are difficulties, also, in transportation, particularly in countries where the population is widely dispersed and health services are not reaching the urban and rural population living in peripheral areas, a problem which can only be solved by the introduction or extension of primary health care.

Finally and as in almost all health problems for which the public is at least partially responsible, lack of awareness by the people due to insufficient support of the programmes by health education and information is also one of the main obstacles.

Health education and information of the public

WHAT EVERYBODY SHOULD KNOW
ABOUT
TUBERCULOSIS

The infection is mainly transmitted by exposure to bacilli spread into the air from one patient with pulmonary tuberculosis. Coughing, sneezing, and even talking, by a patient fills the air with droplets of moisture containing the bacilli.

Fortunately, infection does not often lead to disease, but the risk persists throughout life.

Before 1946, the only measure to protect the community from infection was to isolate patients in sanatoria. Since then powerful drugs have become available to render patients non-infectious in a short time and to cure them completely.

Thus, the best for the individual is also the best for the community: early diagnosis of patients with tuberculosis and their effective treatment.

The simplest and most pertinent way of diagnosing tuberculosis is by microscopic examination of the patient's sputum. The usual symptoms of pulmonary tuberculosis are persistent coughing, loss of weight and fever.

Treatment requires a regular drug intake, daily or twice a week, for 12 months. Recently short-course treatment regimens (6 months or 9 months) have also been developed and introduced in a number of countries, but they are more expensive.

BCG vaccination is the recommended measure to prevent tuberculosis in children. It is applied to infants a few days after birth, or when they are 2-3 months old, simultaneously with other vaccines.

PRIMARY HEALTH CARE IN DJIBOUTI

A National Workshop on Primary Health Care, organized by the Ministry of Health with WHO and UNICEF collaboration, took place in the Republic of Djibouti - the newest among Member States of the Region - from 13 to 18 February last.

In his opening allocation, H.E. Prime Minister M. Barkat Gourad Hamadou stated that the meeting was an outstanding testimony of international cooperation and he thanked the WHO and UNICEF representatives "for their efficient intervention through which we can hope an evolution towards better living conditions for our families and the whole people of Djibouti."

In his message addressed to the participants, Dr A.H. Taba, WHO Regional Director, said that "the presence of the highest officials from different ministries of the country, attending this meeting, testifies the willingness and enthusiasm of Djibouti to establish inter-sectoral cooperation in order to solve the serious problems in the area of primary health care."

"The Republic of Djibouti", Dr Taba said, "like other countries in the Region, has undertaken with courage the study of the best approach to bring appropriate solutions to its health problems by putting emphasis on the development of primary health care."

Dr A. Absieh Warsama, Director-General of Public Health, chaired the seminar which brought together some 80 participants from different sectors and disciplines such as health, agriculture, husbandry, education, social welfare, etc. Many different subjects were treated in the course of the meeting, including the education and training of health personnel, maternal and child health, family planning, education for health, vaccination, prevention and control of endemic diseases, promotion of mental health, health statistics, essential drugs, and above all the development of a national strategy for the organization of primary health care at country level.

The results of the discussions and works of the seminar will be submitted to the national political leaders for decision, with a view to put proposed solutions into practice and to improve health care services so as to make them benefit the whole of the country's population. It is expected that, as a follow up, the seminar will help in the preparation of Djibouti's health plan for the forthcoming years.

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COMBATING DIARRHOEAL DISEASES IN AFGHANISTAN

Diarrhoeal diseases, mainly related to unsafe environment, are the most important cause of illness and death among young children in Afghanistan, amounting to approximately 40 per cent of all illnesses in the age group under five.

In Afghanistan as in many other parts of the developing world, diarrhoeal episodes are more frequent and more severe among malnourished children. By perpetuating each other, one causing the other and reciprocally, diarrhoea and malnutrition contribute to the high rate of illness and death among children.

Being associated with different causes, the problem of diarrhoeal diseases is a complex one and needs a multiple approach including better nutritional policies; improvement of water supply and sanitation; and health education and information of the public leading to better child care and more hygienic practices. All this can be achieved only in the context of primary health care (PHC).

Control of diarrhoeal diseases based on oral rehydration.

The control programme of diarrhoeal diseases in Afghanistan is mainly focussed on oral rehydration, a treatment which consists of rehydrating the patient using a solution containing salts and sugar and given to him either with a bottle, a cup or glass, or a spoon. Oral rehydration was introduced in Afghanistan in 1979 through a WHO/UNICEF-assisted project, the target of which was to make this new and simple therapy accessible to at least 25 per cent of the children below the age of five by the end of 1985. WHO and UNICEF provided sufficient supplies of packages. Also, a production line was provided by UNICEF to achieve self-sufficiency of these vital products.

Health Manpower Development

Parallel with the provision of oral rehydration salts, training of health personnel and preparation of health education materials were carried out by the Public Health Institute in Kabul. All in all, ten training seminars, refresher courses and workshops on diarrhoeal diseases were held at the Institute in 1979-1980 in an attempt to persuade medical and auxiliary personnel of the efficiency and advantages of this system.

To further strengthen the activities of the CDD programme in Afghanistan, two oral rehydration training and demonstration centres were established in Kabul City in 1981. Nevertheless, further expansion of the programme would necessitate a larger extension of basic health services, particularly at the primary health care (PHC) level, which is still very scarce in rural areas.

Health Education of the Public

At the same time, a wide public health education programme has been launched with posters, leaflets, booklets, magazines and newspapers articles, as well as radio and TV broadcasting. Schoolchildren are also converted into active propagators of public health messages, not only in connection with diarrhoeal diseases but also with other important matters such as immunization or nutrition.

H.R.H. PRINCE TALAL BIN-ABDUL-AZIZ AL SAUD

SIGNS US \$ 2 500 000 AGREEMENT WITH WHO TO SUPPORT DEVELOPING COUNTRIES

Twenty-nine developing countries throughout the world, including Democratic Yemen, Pakistan, Somalia, Sudan, Tunisia and Yemen Arab Republic will benefit from a US \$ 2 500 000 agreement signed in Geneva on 26 February last between H.R.H. Prince Talal Bin-Abdul-Aziz Al Saud and Dr Halfdan Mahler, Director-General of the World Health Organization (WHO).

The Saudi Prince, brother of the reigning monarch, was signing on behalf of the Arab Gulf Programme for United Nations Development Organizations (AGFUND). This fund, established between Bahrain, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates, assists projects of a humanitarian and developmental nature for developing countries, particularly the least developed.

Nineteen such least developed countries are included in the first agreement between AGFUND and WHO. The project deals with the control of diarrhoeal diseases and will benefit 108 million children below the age of five in the course of 1982 and 1983. The funds will serve to strengthen national diarrhoeal disease control programmes including cholera control. This action will include treatment of acute cases with oral rehydration salts, education of mothers on appropriate feeding of children, encouragement of maternal and child care practices, as well as improvement of environmental health through education to encourage the appropriate use and maintenance of drinking water and sanitation facilities.

In a brief address during the ceremony H.R.H. Prince Talal said "if we raise our voices and unify our efforts together to help the poor, I am sure we shall see the dawn of a new era of stability, peace and well-being for all the people of the world."

Stressing that "poverty, death, hunger and disease do not differentiate nor separate sex, race or religion", Prince Talal added that "society must support the United Nations humanitarian and development organizations to enable them to perform their duties and shoulder the responsibilities for which they have been established."

In reply, the Director-General of WHO said to the Saudi Prince: "Since your appointment as President of AGFUND you have dedicated yourself to the humanitarian and noble activity of helping the poor, the sick, the hungry, the refugee and in general, needy people. It is not surprising, therefore, that the mass media call you "Prince of the Poor"... "I wish to thank Your Royal Highness most sincerely and, through you, the seven member countries of AGFUND, for their extremely valuable collaboration with WHO to finance some of our humanitarian programmes in the developing world."

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