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REGIONAL OFFICE FOR THE  
EASTERN MEDITERRANEAN

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TRACHOMA CONTROL IN THE EASTERN MEDITERRANEAN  
REGION

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At its second session in Geneva, the Regional Committee for the Eastern Mediterranean region adopted a resolution endorsing the steps which the Regional Director proposed to take to investigate the methods of treatment and control of trachoma. A circular letter was accordingly addressed to all Member States in the region requesting that, as a preliminary to consideration of the problem, information be furnished on the incidence of the disease, the anti-trachoma services provided, the preventive measures in force and the facilities available for the training of medical personnel in methods of control and treatment.

The replies received, which have been summarized in the attached table, are not complete. None has been received from several important countries i.e. Iraq, Saudi Arabia. All, however, reveal considerable difficulty in the accurate expression of the incidence of the disease, although its prevalence is notorious. Special anti-trachoma services have been established in some countries, notably in Egypt and in Turkey, but these are mainly curative in character. Many countries still adhere to the "classical" form of treatment alone; others fail to take full advantage of modern methods. Turkey and Egypt are the only countries which combine health education and fly control measures in their programme of control.

There is ample evidence to show that the measures hitherto employed in the countries of the region have been insufficient to control the disease. On the other hand, there is little evidence to show to what extent these measures have been effective in reducing its incidence.

The EMRO, conscious of the magnitude and difficulties of the problem, and encouraged by the results obtained in the modern treatment of trachoma by means of sulfa drugs and antibiotics, are anxious to evolve a practical plan of operations for a campaign designed to control the disease which shall be based broadly on two principles viz:-

- a) the elimination of the source of infection by mass treatment of those afflicted by the disease; and
- b) the improvement of environmental sanitation as a means of eliminating factors, such as flies and dirt, believed to be associated with the development and spread of the disease.

It is generally accepted that in regions of high incidence trachoma is mainly a disease of children and, of children under school age. As "mass treatment of trachoma by modern methods can only be effectively carried out in schools or in communities where supervision is possible and cases can be followed up" (Bietti), it is proposed that the campaign shall have as its principal objective the treatment of acute trachoma among schoolchildren, and where MCH services are available, their cooperation shall be sought in the treatment of pre-school children attending MCH centres. Undoubtedly there will be a number of children in some

countries who neither attend school nor MCH centres and it will be important for some method to be devised whereby this group may be reached. Whichever method of treatment is selected, it will have to conform with three basic conditions namely:-

- 1) that it should be prescribed in a manner which makes it possible to administer within normal school hours;
- ii) that it could be easily administered in MCH centres and if necessary at home to pre-schoolchildren; and
- iii) that it is not prohibitively expensive.

Having regard to the difficulties attending a prolonged course of treatment of any disease in a mass campaign, it is a matter of extreme practical importance that the most simple, the shortest, the most effective and the most economical form of treatment possible should be selected. The last point is particularly important since one of the desiderata of the campaign is to establish a pattern of control and treatment which is within the financial resources of the countries concerned and which could be adopted by them permanently as a routine measure.

Bearing these considerations in mind, the EMRO, in planning this project, find themselves confronted with a wealth of excellent, though somewhat perplexing reports on recent work on trachoma carried out in the field by a number of eminent experts, from which it is difficult to decide on the best form of treatment for the proposed campaign. Thus:-

- a) Should the treatment prescribed be the sulphonamide treatment alone (Tabone-2)?
- b) Should it be by frequent local applications of antibiotic ointment alone (Mitsui & Tanaka -3)?
- c) Should it be a combination of the two in the form of a sulfa drug orally and an antibiotic ointment locally (Bietti-1)?
- d) Which sulfa drug and/or which antibiotic should be used? In what combination, dosage and frequency, and for what period?
- e) What is the minimum equipment required for a portable field laboratory for the purposes of the campaign?
- f) Having regard to the expense involved, how far is fly control through environmental sanitation justifiable in an operation designed to control trachoma?

The EMRO would appreciate the advice of the Expert Committee on these questions. Meanwhile, budgetary provision has been tentatively made for five teams of experts each composed of an ophthalmologist, a sanitary engineer, a public health nurse, a statistician and a sanitarian with appropriate transport and equipment, but the ultimate composition of the teams will depend on the policy agreed upon for the plan of operations. It is intended that the ophthalmologists shall be recruited in the

first year of the project (1952) in order to carry out detailed survey of the incidence of the disease in the affected countries and of the curative and preventive facilities provided. On the basis of these surveys the final plan of operations will be drawn up on a country basis and the remainder of the teams recruited. It is envisaged that the teams shall be assigned to one or more countries and that each shall visit in turn the affected districts for as long a period as the method of treatment selected demands.

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References:

1. "Memo on the Treatment of Trachoma by Antibiotics and Chemotherapy" G.B. Bietti, WHO/Trachoma/17.
2. "Anti-Trachoma Campaign in Gozo" - Vincent Tabone, WHO/Trachoma/3.
3. "Terramycin, Aureomycin and Chloramphenicol in the Treatment of Trachoma" - Mitsui and Tanaka, WHO/Trachoma/2.

| Country | Statistical(1)epidemiological data(2) | Anti-trachoma services available. | Preventive measures(1) and Treatment (2) | Facilities for training and exchanging personnel. |
|---------|---------------------------------------|-----------------------------------|--|---|
|---------|---------------------------------------|-----------------------------------|--|---|

TURKEY

| (Contnd.) | Persons examined:     | (a)     | (b)    | (c)    |
|-----------|-----------------------|---------|--------|--------|
|           |                       | 1082617 | 562069 | 287474 |
|           | Trachoma cases:       | 536383  | 111722 | 16621  |
|           | Morbidity rate:       | 49.5%   | 19.9%  | 57.8%  |
|           | Unilateral blindness: | 13066   | 420    | 328    |
|           | ,% of examined:       | 1.2     | .07    | .1     |
|           | Bilateral blindness:  | 1456    | 16     | 106    |
|           | ,% of examined:       | .13     | .003   | .04    |

The incidence in the endemic zone is thus about 50% while in special groups it is about 20%. In non-endemic areas the incidence of trachoma is exceedingly small.

UNITED

KINGDOM

BRITISH

SOMALILAND Only 27 cases have been reported. The period of time covered, is not reported.

CYPRUS

A few hundred cases originally reported. At present the incidence of the disease is negligible.

A campaign toward the eradication of the disease has met with great success.

Note: Additional information on trachoma in relation to the regional countries, may be found in the "Epidemiological and Vital Statistic Report" World Health Organization, Vol.II, Nos.11-12, November & December 1949 (E.V.S. 30-31).

| Country  | Statistical (1) Epidemio-<br>logical data (2)   | anti-trachoma services<br>available.  | Preventive measures (1)<br>and Treatment (2)  | Facilities for<br>training & exchanging<br>personnel. |
|----------|---|---|---|---|
| PAKISTAN | <p><u>In East Bengal</u> the disease is prevalent only in urban areas, especially Dacca &amp; Bogra. In <u>Punjab</u> (1938-1949) the percentage of trachoma in patients with diseases of the eye by districts ranges between 20% (Lahore) &amp; 50% (Sialkot)</p> <p><u>In N.W.F.</u> during 1949, 67,083 cases were treated in the hosps. &amp; dispensaries; approx. 2/3 being from D. I. Khan, Chitral &amp; Peshawar.</p> <p><u>In Sind</u> no appreciable number of cases registered at the Civil Hospitals. <u>In Baluchistan</u> 5,707 cases registered; period not stated.</p> | <p><u>East Bengal</u> No special services. Treatment in gnl. hosps. etc. <u>Punjab</u> No spl. treatment centres. Two private Opth. Hosps. Free treatment in hosps &amp; dispensaries. <u>NWFP</u>: Ditto <u>Sind</u>: Disease more frequent in refugees, than local population. Treatment in the R/B.G. Mohattaye Hospital Karachi; -RB H. Menda Eye Hosp. Shikarpur; Handerson Blind Relief association, Tharparkar at Mirpurkhas. <u>Baluchistan</u>. No specialized services Patients are treated at Civil Hospital Quetta.</p> | <p>1. Preventive not organized on a national scale.</p> <p>2. Classical treatment in common use. Antibiotics and sulphadiazole drugs not commonly employed.</p>   |   |
| TURKEY   | <p>Morbidity &amp; Blindness due to trachoma (1939-1949) in a) 14 Depts. under the control of the National Trachoma Campaign b) special groups, including factories, army, schools, jails c) surveys made in 1943-4 &amp; 1948 in Ophthalmic Clinics of 24 Hospitals.</p>   | <p>1. There is a National anti-trachoma service in the endemic zone which comprises Southern &amp; Eastern Anatolia. The services which began to function in 1925 include 14 departments and it is organized to cover 2 controlled areas: Adana and Diyarbakir. It is broken down into treatment centres (99), hospitals (16), dispensaries (40), and rural units.</p>  | <p>1. Preventive measures include case-finding followed by treatment, mass prophylactic, fly control, special school for trachomatous children.</p> <p>2. Treatment of the classic type is in general use. Antibiotics have given good results in secondary infections but they have no specific activities. Nevertheless, they are used extensively.</p> | <p>Willing to participate.</p>                        |

| Country | Statistical (1) Epidemio-<br>logical data (2)   | Anti-trachoma services<br>available.  | Preventive measures (1)<br>and Treatment (2)  | Facilities for training<br>and exchanging personnel.                        |
|---------|---|---|---|---|
| IRAN    | Incidence in the general population at Shushta & Dizful near Ahwaz is 70-80%. In the Central & Northern mountain areas: 45%. In Teheran: 18-20%   | Services provided at the Fahraby Eye Hospital & other Institutions are now limited, but will be increasing.                       | Sulfadruugs & antibiotics seem to be useless, except aureomycin. The classic treatment is in common use.  | Visiting fellows are welcome to the Fahraby Eye Hospital.                   |
| JORDAN  | No statistical data submitted   | There are no national or private institutions for trachoma control. Cases are treated free in govt. clinics & school eye-clinics. | Details not given.  | Not able to participate.  |
| LEBANON | Most frequent in the Littoral & Southern regions due to proximity to trachomatous countries. Incidence: 80% in poor classes & 5% among the well to do. In the Northern districts; 1-2%. At Beirut 95% among Armenian immigrants. Imported infections among refugees & others are an important factor. About 2000 cases reported annually. | There are 4 ophthalmic wards in four provinces and one in the capital, all of them under specialists.                             | <ol style="list-style-type: none"> <li>1. Notification of the disease is compulsory; but there is no provision for segregation of patients, except in official institutions.</li> <li>2. Antitrachomatous campaign consists of case-finding and treatment.</li> <li>3. Sulfonamide (large doses and prolonged treatment) has given better results than penicillin.</li> </ol> | Health authorities are willing avail themselves of intra-regional training. |

TRACHOMA

| Country              | Statistical (1) Epidemio-<br>logical data (2)   | Anti-trachoma services<br>available.  | Preventive measures (1)<br>and Treatment (2)  | Facilities for training<br>and exchanging personnel  |
|----------------------|---|---|---|--|
| EGYPT                | 1. Percentage of trachoma in patients attending ophthalmic hospitals, during 1936-1947, range between 79-89%. Annual percentage of active infective stage among poor patients, from 30-73%; cicatrized non-infective stage, between 54 & 64%. The percentage of trachoma, seen in the ophthalmic school clinics, varies with the localities and social condition of children. | 1. School ophthalmic clinics established in 1902 by the Min. of Health & now under the Min. of Education.<br>2. There are other ophthalmic services under the Min. of Health & Social Affairs, with emphasis in health education, ophthalmic hygiene and fly control.<br>3. In Egypt there are 107 ophthalmic units, including hospitals, 15 of which are tented. In 1950, budget provision exists for 5 ophthalmic units.<br>4. Main anti-trachoma institutions are: Giza Memorial Hosp.; Ophthalmic Dept. in Kasr El-Ainy Hosps., & School Opth. Clinics, Lab Rod El-Farag. | 1. Health education of the public in trachoma & ocular hygiene. Fly control measures.<br>2. Sulfonamides and antibiotics have no effect on well developed trachoma. Trachoma benefits from such treatment indirectly through the effect on purulent infections. Better results are obtained with routine local treatment. | The Min. of Health has offered all available facilities for intra-regional training. The programme for exchange of technical personnel was accepted. |
| ETHIOPIA             | Trachoma seems to be less severe than in other countries.   | 1. Eye specialist in schools<br>2. Central Opth. Dept. in Haile Selassie I. Hospital.<br>3. Some clinics in the capital.  | No information submitted.   | As the Research Inst. is being transferred to another building, Ethiopia cannot participate in the programme.  |
| FRENCH<br>SOMALILAND | 1. Not widespread in the country.<br>2. Different racial susceptibility observed: 60% incidence in a Jewish colony living in Djibouti until last year. Trachoma is common among Arabs, particularly Yemenites. Somalis & Dankalies, are almost free except through contact with Yemenites.  | No special institutions. Treatments are given in hospital & health centres. Local population consider the disease as incurable. Sequelae are common and important   | 2. Classical treatment is used with good results, in acute cases Prolonged & subconjunctival infiltration of penicillin have given good results.  | Not possible due to scarcity of personnel.   |