

## Republished

# Report on a visit to Saudi Arabia \*

**Tigani El Mahi**

*Source:*

1. El Safi A, Baasher T. Selected Essays: Tigani El Mahi. Khartoum University Press, Khartoum 1981 : 149-155.

2. Biography of Doctor Eltigani Elmahi. Available at: <http://eltiganielmahi.com/en/>.

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On 23 September, I arrived in Taif and was privileged to meet his Excellency the Minister of Health, Dr. Rashad Pharaon, his Vice-Minister, Dr. Bashir El-Roumi and Dr. Ahmed Chalaby.

After a preliminary briefing, we immediately sat down to work on the plans of the proposed new mental hospital. His Excellency desired first of all that the hospital location be at Taif; and the site decided upon was in many ways the most favourable. The architectural plans and designs which I was shown and which were mainly inspired by H.E. the Minister, seem to provide adequately for the type of services needed. The proposed units and their spatial relations have not yet been finalized. The capacity proposed is two hundred beds and considering – in long-term views – the future civic and health developments of Taif, the location may not appear as seriously incompatible as initially envisaged; still, in the light of the immediate present, I dare say that the scheme may not fulfill its mental health expectations in the absence of

organized measures to cover initial treatment and care at the large urban hospitals in Mecca, Medina and Jeddah, which would be in the circumstances the clearance and reception centres for Taif. Full reference was made to this in the report of discussions with Dr. Hosni El Taher on 8 July 1959.

## II Taif Mental Hospital

This hospital is run by Dr. Abdel Raouf Thabit, a qualified Egyptian psychiatrist of satisfactory experience. It occupies a multiple storied building originally designed by its owner for residential purposes. It has thirteen rooms, nine of which are wards for patients, the rest being quarters for the kitchen, administration, treatment, including work therapy, rotating custodial staff, and police. The number of inmates on the date of my visit amounted to 218 patients of both sexes. They were all under treatment. It appears that the majority of cases are admitted by police or relatives on the score of uncontrollable conduct. This being so, it is conceivable that many of the cases would likely prove to be irreversible and hence refractory to treatment.

Despite the difficulty of the nursing situation, however, a wide range of physical methods of treatment, I am told, are applied, but as everywhere, I think, good results are much in doubt, in the absence of efficient and reliable nursing which is such an essential prerequisite to any form of medical care.

Close physical contact and crowding do not evidently contribute as unfavourably as one would expect in western culture owing to the

\* WHO East Mediterranean Regional Office, Alexandria, Sep. 1959.

collective tendencies so characteristic of the society and its institutions. This fact is all the more remarkable because even in complete nomads, crowding does not have evil effects provided that claustrophobic factors are not intrinsically involved. The food is ample and native dishes are being introduced to stimulate appetite and revive emotional interest in food as the food drive may be very strongly specific in certain cultures. Outdoor sheds are being erected to encourage open-air life and activities.

The formal procedures regulating admissions, custody and discharge, and normally taking cognizance of matters of personal affairs and status such as inheritance, marriage, divorce, etc., are exclusively based on Islamic law, though the physician is frequently invited to act in his capacity as an adviser. It was suggested that the advent of modern hospital care may be instrumental in creating some situations where specific administrative and legal rulings may become imperative owing to their contribution in therapy and perhaps in prevention as well. It was suggested that EMRO might perhaps help in preparing a suitable draft to be used as a basis for such and ordinance. The suggestion was accepted and EMRO is now engaged in the preparation of the draft.

### III Mecca

I arrived in Mecca on 29 September and after exchange of courtesies and information with Dr. Wasil Arislan, I proceeded in the company of Dr. Mohamed Amin Mukeem to visit the two hospitals of Agiad and of King Abdel Aziz where Mental Health problems as related to general hospital practice were discussed with the Directors of the two hospitals respectively. Furthermore, enquiry was made into the possibilities and technical capacities of the two hospitals for acting as efficient outposts for the Taif Mental Hospital, and into what is regarded minimally as prerequisite in terms of special training and equipment for that purpose. It emerged that it would be possible

for a general-duty doctor, in the course of his normal hospital duties, to be entrusted with care of mental cases, especially acute ones, on their way to Taif. Special provisions for nursing and transport facilities were also discussed. Both Directors are agreeable to the idea in principle and EMRO is working on the plans of a special training course in mental health for regional practitioners likely to be involved in such duties. This course of training, it is hoped, will emphasize the general management of acute emergency cases and of neuroses in general as well as the use of drugs in psychiatry.

### IV Heat Effects During Pilgrimage Season

It is officially estimated that in the year 1370 A.H. (1950 A.D) about 7000 deaths were attributed to heat effects alone during the brief season of pilgrimage. Last year it was estimated that in the hospital of Agiad alone in Mecca about 500 cases ended fatally from the same cause. Many of these cases were admitted with hyperexia associated with delirious excitement or in terminal coma attended by convulsions.

On account of this and of the fact that the same seasonal factors may still recur for three or even more years in view of the constant chronological retrogression of the civil lunar year by roughly eleven and a quarter days a year (consequently no correspondence exists between the lunar year and the seasons as is found in the civil solar system) because of this I have discussed with Dr. Hisham Mulhis the possibility that EMRO would make a study of the problem and would, if required, make recommendations.

On my arrival in Khartoum, I contacted Professor Dean Smith, Head of the Physiology Department, University of Khartoum, and discussed this subject with him. Professor Dean Smith kindly promised to write a report in which he would make certain very practical recommendations. In fact his report has already been received, a copy of which is an-

nexed to this report.

On enquiring about figures pertaining to early phases of heat effects such as exhaustion and cramps which are ordinarily handled by the mobile field hospitals of the Medical Missions of different Islamic countries, I was informed that they have no such records in their possession in Jeddah. It appeared that these Medical Missions work quite independently and completely autonomously and that work is not submitted to any central process of coordination or organization. This state of affairs, if it continued, would lead to consequences which in addition to retarding the full utilization of services may seriously misrepresent statistical facts needed for appraisal and planning. It may even give rise to grave consequences in case of epidemic onset.

## V Zoonoses

Tuberculosis constitutes a major health problem. Public awareness is steadily increasing and before long the problem may assume important mental health implications. The role of domestic animals in transmission chains is important to investigate as I felt that dogs were very rife within the sanctuary of Mecca where within a certain perimeter destruction of animals is ritually prohibited except under certain stipulations. Some of these dogs are emaciated and in fact suspicious looking. In Medina I have myself heard a goat coughing.

## VI Medina

I arrived in Medina on 30 September and had an interesting briefing interview with Dr. Said Mustapha, Senior Health officer of the area.

### *Kings General Hospital in Medina*

This hospital was built in 1372 A.H. (1952 A.D.). It has a capacity of 120 beds. The common causes of admission and of patients attendance are malaria, dysentery and chest conditions (tuberculosis in particular). Surgical conditions are mostly piles, hernia, and fistulae.

Neurosis was said not to be common but it is highly probable in my limited experience

that many cases may masquerade- and in fact they do – in hypochondriacal form as bowel symptoms, for example, though the other prevailing medical and surgical conditions enumerated above may provide suitable means of expression for neuroses. The gastro-intestinal hypochondria to which I made reference is very interesting because it tends to recur as a feature in medical documents from early periods, so much so that it had been more or less a characteristic reactive pattern during certain medieval epochs from which one can make certain deductions of earlier health concepts. On the other hand, hysterical expression in women is common as everywhere, sometimes in subtle forms characterized by twilight states. This was evident in the cases I had been able to investigate.

It is interesting that the *Dracunculus Medicinalis* (the Guinea worm) so called because of its supposed prevalence in Medina in the past, is so rarely seen today. Causes of this decline are unknown and so far as I was able to gather, the disappearance could not wholly be attributed to specific eradication methods. However, I do not feel certain about this. It is perhaps appropriate to mention that Rhazes was the first to suggest its parasitic nature and to refer to water as a possible medium of propagation and that Avicenna's described it as an "extruded tendon which is the basis of the etymology of the term *Al Irk Al Madiani*".

### *Medical Society of Madina*

In Medina, an active medical society exists with a membership of fourteen members. It holds regular clinical sessions for discussion of cases and for stimulation of scientific interest. There is, however, a dearth of literature and EMRO is sending some of the WHO publications to the Secretary.

### *School Health Services*

There is a growing interest in school health services which is commendable because of its prophylactic contribution to mental health as well as physical health.

There are three whole-time physicians working for school services in Medina: a dentist, an oculist and a general duty doctor. Some WHO Technical Reports dealing with school health are being sent to them.

#### ***The Memorial Maternity Hospital***

This Hospital has a capacity of forty beds. It was intended to be exclusively for midwifery and gynecology but on account of pressure for admissions, it is acting as an overflow for the king's General Hospital. Contracted pelvis due to rickets and osteomalacia are common and twenty-two Caesarians were done last year. Ante-natal care does not yet exist and child welfare has not yet been established in the hospital. These two services, I believe, are essential and their mental health aspects are self-evident.

I regret I had no opportunity to visit the extramural center attached to the health office building.

#### **VII Jeddah**

I had the opportunity of meeting Dr. Hisham Molheus, Deputy Senior Health Administrator of Jeddah and the Western Coast. Benefiting from his experience I have been able to gain information about some aspects of pilgrims health problems and of health reactions in the settled population to such influx. I also listened with interest to his observations and remarks on the psychology of the pilgrim himself and his vicissitudes. The instances he gave provided some indications of his comprehensive approach which takes full consideration of these psychological factors in their individual and mass form and as they particularly involve the general health situations of Pilgrimage.

Dr. Molheus kindly arranged for me to visit some of the hospitals in Jeddah and I was able to see for myself and to appreciate as well the useful work done during pilgrimage and all the year round.

I visited the Quarantine Station with which is incorporated a surgical unit, also the general hospital of Jeddah which is equipped with a blood bank and finally Al Kandara general

hospital. The standard of services is undoubtedly high.

One feels with satisfaction that all classes of clinical workers in Jeddah, in fact even specialists whose roles are normally outside the public health line, have a genuine interest in general public health matters, especially communicable diseases. This is fully conceivable in relation to the recurrent risks to which Jeddah is exposed every pilgrimage season.

This public health awareness largely contributed to their medical insight as I have experienced in my discussions with them.

#### **IX Recommendations**

- 1) That EMRO continue to give effective technical assistance for the Taif Hospital Project at all levels where needed.
- 2) That EMRO sponsor the fellowship needed for the training of a Saudi Arabian psychiatrist if a suitable candidate is selected. I understand that no such candidate is available at present.
- 3) The appointment of an Arabic-speaking psychiatric nurse for organizing the nursing services of the Taif Mental Hospital and for pioneering the training of hospital nurses and aids.
- 4) Plans are under discussion for holding an EMRO sponsored intensive course of training in Mental Health (duration four to six weeks) for general practitioners. When the project is finalized, details would be given.
- 5) The response of His Excellency the Minister of Health to the plan of action for combating sunstroke is requested so that EMRO may proceed with more practical suggestions if needed. This is all the more urgent in view of the fact that we are now approaching the end of the month of Rajab with only a few weeks to go.

#### **ACKNOWLEDGMENT**

It is indeed a pleasant task to conclude this report by expressing my deep thanks and



gratitude to His Excellency the Minister of Health, Dr. Rashed Pharaon for his Kindness and generosity so characteristic of Arab tradition, and for the inspiration he has given in the course of his valuable contributions in all range of topics of health discussed. I wish also to thank the Vice-Minister, Dr. Bashir El Roumi for his great share in the discussions of plans. I am also grateful to Dr. Ahmed Chalaby whose experience of social progress and change in the country has been of benefit to me, to Dr. Akram Shouman, Dr. Hisham Molheus, Dr. Wasil Arislan, Dr. Said Mohamed Moustapha, Dr. Raghieb El Najar, Dr. Mohamed Amin, and to El Sayed Mohamed Farid, the Ministry's Architect, and many others whose names would fill a complete page. I should like to thank El Sayed Mohamed Jan, the Senior Administrator Jeddah, who had been my congenial companion throughout my trip to El Medina El Menawara and who had helped in numerous ways to make my visit a success and a pleasure. Last but not least, I am also specially grateful to Dr. Saad Afifi, WHO malaria consultant, who made available for me a great deal of his time and experience and through whose auspices I was able to make my initial contacts.

Finally I would like to thank Dr. Hassan for the orientation he has given and to congratulate him on his miraculous escape from the serious aircraft accident which happened when I was there.

#### NOTE \*

*During my recent visit to Saudi Arabia, I had the opportunity of visiting, in the company of H.E. Sayed Gamgum, Minister without portfolio, a section of the new road in the making between Taif and Mecca. In a dynamited site, I was attracted by pieces of rock which appeared to me as bearing fossil-prints. I brought back some specimens which were seen by Prof. Dr. Gelal Awad, Head of Geology Department, University of Alexandria. He de-*

*scribed them as igneous rock with dendritic magnesium ore. In his opinion, I was told, they may be of economic value if found in sufficient quantity.*

*\* NOTA BENE: In the final page a geological note is appended which may be of special interest to H.E. Sayed Gamgum, Minister without Portfolio whom I was much honoured to meet and to accompany in his inspection of the Taif- Mecca road-head where this stone reported on was found.*

#### ANNEX

Dr. Tigani El Mahi  
World Health Organization  
Eastern Mediterranean Regional Office

Dear Dr. Tigani,

#### *Heat Illness on the Pilgrimage*

As you asked me to do some weeks ago, I have thought a lot about this problem of organizing the prevention, treatment and investigation of heat disorders in pilgrims on the way to or from Mecca, and I find it very difficult to produce any constructive plan which contains enough details to be of much value, especially on the preventive side. The reason is, of course, that I do not know enough about the procedure, terrain and conditions, nor about fasts and other observances and circumstances which might tend to increase the risk of heat disorders. However, I have put down some headings which may serve as the barest skeleton in drafting a plan. Much would depend on the number of staff and type and amount of equipment and other facilities available. It seems a wonderful opportunity to do not only a very big piece of public health work but also investigate some of the outstanding problems. The real mechanism and an etiology of heat hyperpyrexia is still almost unknown and I cannot but feel that it is a soluble problem if a suitable team got to

work on the Pilgrimage.

This department, and indeed the whole faculty, could offer very little in the way of staff, but we would, as you know, be only too happy and indeed enthusiastic to cooperate, and if we could form a nucleus or training centre, I think it likely that this would receive the blessing of the University Authorities and of the Ministry. I should emphasize, however, that at this stage this is a purely personal letter and I have not consulted any of the authorities.

I also append a short, selected bibliography. It consists only of books, monographs and major review articles on the subject, but, I think covers most of the important works at present available on the general problems of Heat Disorders. The Journal literature, even in the last ten years, runs in to many hundreds, probably thousands of articles mostly on individual, often relatively small, aspects of the problem. Almost all the sources that I have listed have large bibliographies and any special references needed could be followed up through them.

I fear that what I have to offer at the moment is very meager, but I hope you will let me know how the scheme progresses and allow me to contribute in any way I can.

With best regards,

Yours sincerely,

(Signed)

Dean Smith

Dean, Faculty of Medicine

Khartoum

#### ENCLS:

1. Disorders due to Heat
2. Heat Disorders on the Pilgrimage

#### **DISORDERS DUE TO HEAT**

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#### **HEAT DISORDERS ON THE PILGRIMAGE**

##### **A. Treatment**

Stationary Centres

Mobile Centres

- **Stationary:** On the main sites where heat disorders are likely to occur.
- **Mobile:** Capable of movement to concentrations of pilgrims or in response to calls.
- **Staff:** Depends on numbers available. Large centres must have a doctor in charge. Smaller centres and mobile centres could be effectively run by a trained orderly, with trained assistants, some nursing personnel and subordinate staff, e.g. cleaners, driver, etc.
- **Equipment:** The absolute essentials are:
  - (1) Equipment for administration of suitable fluids intravenously :  $\frac{1}{4}$ ,  $\frac{1}{2}$ , full, hypertonic saline, etc. "drip sets, equipment to sterilize them, syringes needles, stands, supplies of salines, etc.
  - (2) Equipment for cooling hyperpyrexial patients. This does not necessarily require ice. The use of wet sheets and fans is still the best and most physiological method of cooling a patient.

- (3) Ordinary medical equipment for medical emergencies and for resuscitation. Stationary Treatment Centres must be housed in cool, well-ventilated buildings, temporary or permanent (or even tents, but they would have to be good ones) and must have an abundant water supply, reasonable sanitary arrangements and, if possible, electricity.
- Diagnostic Equipment. The minimum for the smallest treatment centres would be equipment to measure rectal temperature, blood pressure, urine chloride by a simple means (e.g.: Fantus method) plus ordinary medical bag.
  - Transport: Vehicles must be large enough to carry stretchers,, carry large water tanks, and be electrically powerful enough to run fans if necessary. (I personally do not think it would be necessary for them to be air-conditioned.)
- a) Temperature measurement. Rectal temperature, skin surface temperature, needle thermocouples for internal temperatures.
  - b) Electrolyte determinations in blood, urine, and sweat e.g.: Na, K, Cl, and possibly others: chemical methods and flame photometry.
  - c) Measurements of body fluid volumes, e.g.: plasma volume, interstitial fluid volume, total body water.
  - d) Collection of sweat samples and measurement of sweating rates.
  - e) (possibly) Facilities for determination of A.D.H. and aldosterone.
  - f) Haematological determinations, especially haematocrits and centrifuge.
  - g) The ordinary facilities for clinical investigation as generally available in a moderate hospital.
  - h) Meteorological measurement facilities e.g. wet-bulb, dry-bulb, kata-thermometers, measurement of air-movement etc.

## B. Investigation

Base Centre. This I would visualize as:

- a) A central treatment centre.
- b) The main research centre.
- c) The centre from which outposts (mobile or fixed) are supplied and maintained.

As regards (a) *Treatment*, ordinary hospital facilities would be necessary, plus the special facilities indicated in A only on a more elaborate scale.

As regards (b) *Research*, the following seem to me to be the most obvious and basic requirements. I have made no attempt to go into details and no claim that the list is comprehensive.

### Laboratory (or laboratories) and Staff and Equipment

1. To carry out the normal routine determinations of a simple clinical pathological chemistry department.
2. To carry out the following investigations specially related to heat disorders:

## C. Prevention

It is in this section that I feel most at a loss as I know so little of the conditions, exertions and religious sanctions, e.g. fasts. I can only suggest that certain facilities must be provided and the pilgrims encouraged by very possible means to make the fullest use of them consistent with their religious observances.

1. Water. By far the most important thing is that there must be abundant water available everywhere, accessible to everyone regardless of economic or any other considerations.
2. Salt. Salt must also be available but its use in excessive amounts should be discouraged, especially if there is any water shortage. In the presence of abundant water and normal food, primary salt deficiency is, in my opinion, most unlikely to occur in acclimatized persons.
3. Shelter. Adequate shelter must be avail-

able to protect from solar and other radiation and also providing the maximum ventilation and air-movement. This cannot be achieved in conditions of serious overcrowding.

4. Regulation of Activities in such a way that, as far as possible,

- a) excessive exertion is avoided at the hottest time of the day.
- b) excessive exertion is avoided when water is not readily available.
- c) excessive exertion is avoided after great thirst or pre-existing fatigue.

- d) excessive exertion is avoided during or immediately after fasting (food and/or drink).
- e) any unnecessary exposure is avoided.
- f) great overcrowding and massing of people together is avoided. (This enormously reduces air-movement and rapidly saturates air surrounding bodies, even in the open unless there is a good wind, and greatly reduces the body's power to lose heat.)

Dean Smith