



WORLD HEALTH ORGANIZATION  
ORGANISATION MONDIALE DE LA SANTÉ

VBC/MCF/74.2

ENGLISH ONLY

CONFERENCE ON INTOXICATION DUE TO  
ALKYLMERCURY TREATED SEED

Baghdad, Iraq 9-13 November 1974

PROGRAMME

SATURDAY 9 NOVEMBER

- ~~08.00~~ ~~Registration~~  
08.00 OFFICIAL OPENING by H.E. Dr Ezzat Mustapha, Minister of Health, Iraq  
Address by Dr. A.H. Taba, Director WHO-EMR  
Registration - Payment of Per diem  
~~10.00~~ BREAK
- 10.15 Election of Chairman and Vice-Chairman
- PROBLEMS RELATED TO THE CHEMICAL TREATMENT OF SEED  
Dr S. B. Skerfving (WHO Consultant)
- 10.55 CONCLUSIONS AND RECOMMENDATIONS OF A JOINT WHO/FAO MEETING ON  
THE USE OF MERCURIAL AND ALTERNATIVE COMPOUNDS AS SEED DRESSINGS  
Dr J. F. Copplestone (WHO) Abstract No. 2
- 11.10 Discussion
- 11.45 BREAK
- 12.15 THE 1971-1972 OUTBREAK OF POISONING IN IRAQ DUE TO THE INGESTION  
OF MERCURY TREATED GRAIN  
Drs A. W. Al-Mufti and S. K. Tikriti (Baghdad)
- 12.45 Experience of participants on the occurrence of outbreaks of poisoning  
due to the ingestion of treated seed in their own countries.
- 13.45 LUNCH
- 16.15 Moderator, Dr H. A. Sharastani
- FLAMELESS ATOMIC ABSORPTION ESTIMATION OF MERCURY  
Drs L. Magos (UK) and A. M. Jawad (Baghdad) Abstract No. 4
- 16.35 GAS CHROMATOGRAPHIC DETERMINATION OF ORGANIC MERCURY COMPOUNDS IN  
SAMPLES FROM THE IRAQ EPIDEMIC  
Drs F. F. Farris, R. Von Burg and J. Crispin Smith (USA) Abstract No. 5
- 16.55 ACTIVATION ANALYSIS: A VALUABLE TOOL IN THE OUTBREAK OF MERCURY POISONING  
Drs H. A. Sharastani and K. Abbass (Baghdad) Abstract No. 6
- 17.15 Discussion
- 17.45 Adjournment

SUNDAY 10 NOVEMBER

- 08.30 Moderator, Professor S. F. Damluji  
CLINICAL OVERVIEW  
Dr S. F. Damluji (Baghdad) for the Clinical Committee Abstract No. 7
- 09.00 CHEMICAL TYPES OF MERCURY IN PATIENTS  
Drs J. Crispin Smith, F. F. Farris and R. Von Burg (USA) Abstract No. 8
- 09.15 TOXICOLOGICAL ASPECTS OF METHYLMERCURY POISONING IN IRAQ  
Drs H. I. Dhahir (Baghdad) and T. W. Clarkson (USA) Abstract No. 9
- 09.30 Discussion
- 10.00 BREAK
- 10.15 NEUROLOGICAL STUDY  
Drs H. Rustam and T. Hamdi (Baghdad) Abstract No. 10
- 10.35 ELECTROPHYSIOLOGICAL OBSERVATIONS OF METHYLMERCURY POISONED PATIENTS  
Drs R. Von Burg, (USA), H. Rustam, L. Amin-Zaki and S. El-Hassani (Baghdad) Abstract No. 11
- 10.55 TISSUE LEVELS IN ORGANOMERCURY POISONING  
Dr T. Saleem (Baghdad) for the Clinical Committee
- 11.15 Discussion
- 11.45 BREAK
- 12.15 PSYCHIATRIC ASPECTS OF METHYLMERCURY POISONING  
Dr H. Magazachi (Baghdad) Abstract No. 13
- 12.30 THE EFFECT OF METHYLMERCURY POISONING ON THE SKELETON  
Drs L. Amin-Zaki, H. Kudairy, M. Ismail (Baghdad) T. W. Clarkson  
and M. Greenwood (USA) Abstract No. 14
- 12.45 OPHTHALMIC MANIFESTATIONS OF MERCURY POISONING  
Drs G. Hilmi and S. Sab El Aish (Baghdad) Abstract No. 15
- 13.00 ORAL AND DENTAL OBSERVATIONS  
Drs A. Othman and K. Merza
- 13.15 Discussion
- 13.45 LUNCH
- 16.15 Moderator, Professor A. Khalidi  
NOTES ON THE CLINICAL PROGRESS OF METHYLMERCURY POISONING  
Dr L. Amin-Zaki et al (Baghdad) Abstract No. 17
- 16.45 EPIDEMIOLOGY OF ANTIBIOTIC AND HEAVY METAL RESISTANCE IN BACTERIA  
Dr A. J. Thewaini et al. (Baghdad) Abstract No. 18
- 17.00 CHROMOSOMAL STUDIES  
Dr N. Farman (Baghdad)
- 17.15 Discussion
- 17.45 Adjournment

MONDAY 11 NOVEMBER

08.30 Moderator, Dr H. Dhahir

SIGNIFICANCE OF MERCURY LEVELS IN HAIR

Drs T. Giovanoli-Jakubczak (Poland) and G. Berg (USA)

Abstract No. 20

08.50 MERCURY IN HAIR AS AN INDICATOR OF TOTAL BODY BURDEN

Drs H. A. Sharastani, K. Shibab and I. K. Al-Haddad (Baghdad)

Abstract No. 21

09.10 TISSUE LEVELS OF MERCURY IN AUTOPSY MATERIAL

Drs L. Magos (UK), F. Bakir, A. W. Jawad, M. H. Al-Soffi (Baghdad)  
and T. W. Clarkson (USA)

Abstract No. 22

10.15 TREATMENT I

Drs F. Bakir, A. Khalidi, (Baghdad) for the Clinical Committee and T. W. Clarkson  
and M. Greenwood (USA)

10.30 TREATMENT II - MOBILIZATION OF METHYLMERCURY FROM PATIENTS BY THE  
USE OF BINDING AGENTS

Drs L. Amin-Zaki, S. El-Hassani, M. A. Majeed (Baghdad), L. Magos (UK)  
T. W. Clarkson and M. Greenwood (USA)

Abstract No. 24

10.45 AN EXTRACORPOREAL COMPLEXING HAEMODIALYSIS SYSTEM FOR THE TREATMENT  
OF METHYLMERCURY POISONING II: IN VIVO APPLICATIONS IN THE DOG

P. J. Kostyniak, T. W. Clarkson, J. J. Vostal (USA) and A. H. Abbassi (Baghdad)

Abstract No. 25

11.00 EXTRACORPOREAL REGIONAL COMPLEXATION DIALYSIS IN PATIENTS WITH  
MERCURY POISONING

Dr A. H. Abbassi (Baghdad) et al.

Abstract No. 26

11.15 Discussion

11.45 BREAK

SHORT PRESENTATIONS

Moderator, Dr A. Atia

12.15 EFFECTS OF COOKING AND BAKING ON FOODS CONTAINING ORGANOMERCURY  
Drs A. Khalidi (Baghdad) and J. Crispin Smith (USA)

12.25 Questions

12.30 PATHOLOGY OF THE LIVER

Drs M. Hassani and T. Saleem (Baghdad)

13.00 ALKYL MERCURY POISONING - HAEMATOLOGICAL OBSERVATIONS

Dr A. M. Al-Hilali (Baghdad)

Abstract No. 29

13.10 Questions

13.15 ELECTROCARDIOGRAPHIC FINDINGS IN POISONING WITH METHYLMERCURY

Drs M. Murtadha, A. H. Abbassi, K. Hilmi and J. Kwaiti (Baghdad)

Abstract No. 30

13.25 Questions

13.30 Moderator, Dr T. W. Clarkson

METHYLMERCURY KINETICS DURING EXCHANGE TRANSFUSION

S. El-Hassani, L. Amin-Zaki, M. A. Majeed (Baghdad) R. A. Doherty  
T. W. Clarkson (USA)

Abstract No. 31

- 13.40 Questions
- 13.45 LUNCH
- 16.15 ERYTHROCYTE SURVIVAL STUDIES AND HAEMATOLOGIC ASSESSMENT  
Drs L. Amin-Zaki, T. Al-Hitti, M. A. Majeed (Baghdad) R. A. Doherty (USA)  
Abstract No. 32
- 16.25 Questions
- 16.30 CLINICAL STUDIES ON HOSPITALIZED AND OTHER PATIENTS IN NORTHERN IRAQ  
Dr A. R. S. Dabbagh (Arbil, Iraq)  
Abstract No. 33
- 16.40 Questions
- 16.45 MERCURY LEVELS (BLOOD HAIR AND URINE) IN FEMALES USING PHENYLMERCURIC  
ACETATE AS VAGINAL CONTRACEPTIVE  
Dr I. M. A-Jubbori (Baghdad)  
Abstract No. 34
- 16.55 Questions
- 17.00 NORMAL MERCURY LEVELS IN IRAQ  
Drs A. Khalidi, F. Bakir, S. F. Damluji and Al-Mufti (Baghdad)  
for the Scientific Committee
- 17.10 Questions
- 17.15 EXPOSURE TO METALLIC MERCURY VAPOR IN THE MANUFACTURE OF SODIUM  
HYDROXIDE  
Drs S. F. Damluji, F. Bakir, S. Tikriti, M. A. Majeed, (Baghdad)  
T. W. Clarkson and M. Greenwood (USA)  
Abstract No. 36
- 17.25 Questions
- 17.30 LETHAL LEVELS OF MERCURY IN HUMANS  
Drs M. I. Hilmy, R. A. Rachim, A. H. Abbassi (Baghdad)  
Add. Paper 1
- 17.40 Questions
- 17.45 Adjournment
- NOTE: The following papers will also be given during the afternoon at a time and  
place to be announced:
- OCCURRENCE AND LEVELS OF METHYLMERCURY IN ORGANS OF NON-EXPOSED HUMANS  
Drs J. Kosa, V. Zelenko, (Yugoslavia)  
Add. Paper 2
- DIFFERENTIAL EFFECTS OF MERCURIAL COMPOUNDS ON EXCITABLE TISSUES -  
CLINICAL IMPLICATIONS  
Dr A. E. Shamoo (USA)  
Add. Paper 3
- METHYLMERCURY DISTRIBUTIONS BETWEEN HUMAN RED BLOOD CELLS AND PLASMA AND  
EFFECTS OF LETHAL METHYLMERCURY CONCENTRATIONS ON ERYTHROCYTE METABOLISM  
AND ERYTHROCYTE SODIUM AND POTASSIUM CONTENT  
Drs R. A. Doherty, G. B. Segel and M. R. Klemperer (USA)  
Add. Paper 4
- DERIVATION OF DOSE AND EXPOSURE PARAMETERS FROM MEASUREMENTS OF MERCURY  
IN SAMPLES OF HUMAN HAIR  
Drs T. Giovanoli-Jakubczak (Poland) and G. Berg (USA)  
Add. Paper 5
- BRAIN MERCURY CONCENTRATIONS IN RELATION TO DOSE AND DIAGNOSTIC METHOD FOR  
EARLY NEUROLOGICAL SIGNS IN METHYLMERCURY POISONED MONKEYS  
Drs M. Berlin, C. Grant, J. Hellberg  
Add. Paper 6

TUESDAY 12 NOVEMBER

- 08.30 Moderator, Dr S. Tikriti  
EPIDEMIOLOGY I: OUTLINE OF STUDY  
Drs A. W. Al-Mufti, R. M. Mahmood, M. A. Majeed (Baghdad) and  
G. Kazantzis (UK) Abstract No. 37
- 09.00 EPIDEMIOLOGY II: SIGNS AND SYMPTOMS IN RELATION TO INTAKE OF MERCURY  
Drs A. W. Al-Mufti, R. M. Mahmood, M. A. Majeed (Baghdad) and  
G. Kazantzis (UK) Abstract No. 38
- 09.30 Discussion
- 10.00 BREAK
- 10.15 Moderator, Dr N. Al-Rawi  
EPIDEMIOLOGY III: MERCURY LEVELS IN BLOOD AND HAIR; THEIR RELATIONSHIP  
TO EXPOSURE AND TO THE CLINICAL PICTURE  
Drs G. Kazantzis (UK), A. W. Al-Mufti, A. Al-Jawad and Y. Al-Shahwani,  
R. M. Mahmood, M. A. Majeed (Baghdad) Abstract No. 39
- 10.45 EPIDEMIOLOGY IV: CHANGES IN SYMPTOMS AND SIGNS AND THEIR SIGNIFICANCE  
Drs G. Kazantzis (UK), A. W. Al-Mufti, R. M. Mahmood and M. A. Majeed  
(Baghdad) Abstract No. 40
- 11.15 Discussion
- 11.45 BREAK
- 12.15 METHODOLOGY OF EPIDEMIOLOGICAL SURVEYS  
Drs J. F. Copplestone (WHO), G. Kazantzis (UK) and A. W. Al-Mufti (Baghdad)  
Abstract No. 41
- 12.45 Discussion
- 13.15 MERCURY IN FOODSTUFFS DURING OUTBREAK  
Drs F. Bakir, N. Al-Rawi, H. Shahrastani, A. W. Al-Mufti, Amer Kaddori  
(Baghdad) and the Scientific Committee
- 13.35 Discussion
- 13.45 LUNCH
- 16.15 Chairman  
ENVIRONMENTAL CONTAMINATION WITH MERCURY IN IRAQ  
A. Jernelöv, (Swedish Environmental Protection Board) Abstract No. 43
- 16.35 ABSORPTION, DISTRIBUTION AND METABOLISM OF ORGANOMERCURY IN SHEEP  
Report of the Scientific Committee
- 16.55 ABSORPTION DISTRIBUTION AND METABOLISM OF ORGANOMERCURY IN CHICKENS  
Drs Falloji, T. A. Makkawi, I. M. Abou-El-Azim, I. M. Sokkar and  
A. M. Al-Darraji (Baghdad)
- 17.15 Discussion
- 17.45 Adjournment

WEDNESDAY 13 NOVEMBER

08.30 Moderator, Professor L. Amin-Zaki

PHARMACOKINETIC ASPECTS OF PRENATAL AND POSTNATAL METHYLMERCURY  
EXPOSURE IN MOUSE AND MAN

Drs R. A. Doherty, A. H. Gates, T. W. Clarkson, M. Greenwood (USA)  
L. Amin-Zaki, S. El-Hassani, M. A. Majeed (Baghdad)

Abstract No. 46

09.00 PRENATAL METHYLMERCURY POISONING: A TWO YEAR FOLLOW-UP

Drs R. A. Doherty, M. Greenwood, T. W. Clarkson, (USA), L. Amin-Zaki  
S. El-Hassani, M. A. Majeed (Baghdad)

Abstract No. 47

09.30 Discussion

10.00 BREAK

10.15 Moderator, Dr A. W. Al-Mufti

STUDY ON SCHOOL PERFORMANCE IN RELATION TO SUBCLINICAL MERCURY  
CONCENTRATIONS IN HAIR

A. Jernelöv, (Swedish Environmental Protection Board)

Add. Paper 7

10.45 THE FOLLOW-UP OF DELAYED EFFECTS OF ALKYL MERCURY POISONING:  
SUMMARY OF EFFECTS

Dr S. B. Skerfving (WHO Consultant)

11.15 Discussion

11.45 BREAK

12.15 Chairman

THE PRINCIPLES OF MANAGEMENT OF A COMMUNITY POISONING OUTBREAK  
Dr S. B. Skerfving (WHO Consultant)

12.45 ASSISTANCE OFFERED BY WHO IN COMMUNITY POISONING OUTBREAKS

Dr J. F. Copplestone (WHO)

Abstract No. 52

14.45 Questions and discussion

13.45 LUNCH

16.15 \*RECOMMENDATIONS OF THE CONFERENCE

The Participants

CLOSURE OF THE CONFERENCE

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\* Attendance at this session is limited to the invited participants, representatives of UN organizations, WHO staff and temporary advisers, and members of the Iraqi Scientific Committee.