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HEALTH COORDINATION GROUP (HCG)

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I. Notes on the Health System in Iraq and the Oil for Food Programme (UNOHCI, March 2003)

In the Constitution of Iraq it is stated that health is the right of every citizen.

Before August 1990, the health care system in Iraq was based on an extensive and developed network of primary, secondary and tertiary health care facilities. These facilities were linked among themselves and with the community by a large fleet of ambulances and service vehicles, and by a good communications network facilitating referral to the next level of the health care system. It was estimated by the Government of Iraq (GOI) that 97% and 79% of the urban and rural populations, respectively, had access to health care. While the system tended to emphasize curative aspects, it was complemented by a set of public health activities that included, among others, malaria control, an expanded programme of immunizations (EPI) and tuberculosis control activities.

After 1990, the situation of the health care system changed drastically. The Gulf War, followed by more than 10 years of sanctions has resulted in significant damage to the health care network. Because of the current situation, the health facilities are dealing with a severe shortage of critically needed items and supplies. The poor environmental quality, reported malnutrition and difficult socioeconomic conditions have seriously aggravated this health situation. In 1997, it was estimated that only one quarter of the medical equipment available in health care facilities was operational.

By 1997, major surgical interventions were reduced to 30 - 35 % of pre-sanctions levels because of an acute shortage of anesthetics and surgical equipment and supplies. Laboratory services had declined to about 40% of pre-sanctions levels due to a lack of equipment, chemicals and reagents.

The years 1991 – 1997, between the onset of sanctions and the implementation of the humanitarian programme financed by Security Council Resolution (SCR) 986 of 1995) appear to have damaged the information services, the warehousing facilities, some of the testing facilities and communications facilities which supported distribution of medicines.

Before SCR 986, there was a general lack of anesthetics and disposable equipment (gloves, syringes and catheters). Published reports on health in Iraq during the 1990's describe alarming increases in malnutrition and rising rates of immunization preventable disease, gastroenteritis and malaria.

Regarding drugs and medical supplies, patients were, at best, offered doses lower than what would be required by their health conditions. In 1989, the Ministry of Health (MOH) spent over US\$500 million in foreign exchange for required imports for the health sector. The breakdown of the previous figure was as follows:

- 360 million dollars for imported pharmaceuticals, vaccines, medical appliances and disposable supplies;
- 100 million dollars for raw materials for Samara Drug Industries which supplied 30% of the needs;
- 30 million dollars for replacement parts and maintenance of health services equipment; and
- 10 million dollars for ambulances and logistical vehicles.

The local currency component for operating the health care system in 1989 was estimated to represent at least double (approximately 1.0 billion dollars). At the start of 2001, media reports attributed to the Minister of Health/GOI mention that before sanctions, Iraq imported medical goods each year valued at US\$500 million for the health sector and that there were approximately US\$ 1.25 billion of drugs and medical supplies in the stores.

The GOI began a rationing system in September 1990, soon after UN economic sanctions went into effect. This rationing system which has been judged as equitable, covered food and medicines for patients with chronic diseases. WHO estimates that from the 1990 – 1997 approximately US\$ 40 – 50 million per annum was contributed by the GOI for medicines, covering about 10 – 15 % of needs.

Among the first priorities/needs of the medical care system at the start of the humanitarian programme were:

- Life-saving and essential medicines, required vaccines and sera for protecting children and eligible groups of the community against infectious diseases, supplies for surgical operations, reagents for the diagnosis of diseases, insecticides and pesticides to control insect-borne diseases;
- Provision of good quality drugs at low cost; and
- Provision of spare parts for the rehabilitation of hospital equipment; and supply of ambulances.

In estimating the needs for medicines and medical supplies, the following criteria used by the MOH/Kimadia (State Company for procurement of medical supplies) are taken into consideration: population per Governorate, seasonal variation of diseases, disease prevalence, health indicators (vaccination coverage, morbidity, mortality and prevalence of non-communicable diseases), epidemics of infectious disease, and environmental health conditions.

The Two-Year Assessment and Review exercise of the SCR 986 operation (March 1999) estimated that the reconstruction of the health care system in Iraq required, at least, investments in the range of US\$ 2 – 3 billion.

Prior to the arrival of pharmaceuticals/medical supplies into Iraq, WHO observers had conducted a through assessment and analysis of the drug distribution system of MOH/Kimadia. A WHO computerized programme (Micro-Drug) was setup to follow medical supplies as they arrive allowing the monitoring of stock positions country-wide as well as an immediate check of the actual availability within each Governorate. This computerized programme includes a master list of all medical items included in the Distribution Plans (DPs) with the 661 Committee reference number (Comm. Number). In this way, all shipments were able to be monitored at all levels of the drug distribution system.

As at 31 January 2003, The WHO reports that since the start of SCR 986:

+ US\$ 2.139 billion of Phases I – XII medicines, medical supplies and equipment had arrived in Iraq;

+ US\$ 1.735 billion had been distributed (81.11 %); and

+ US\$ 404.1 million represents the storage of medical stocks in Government warehouses (18.89 %).

The breakdown of stocks in storage with regard to all arrivals was: 10.03 % buffer stock; 6.75 % items in quality control; 1.4 % awaiting distribution (working stock); 0.4 % failed quality control/defective; and 0.31 % lacking complementary items/lacking spares or installation capacity.

Data on Selected Health Resources in 15 Center/South Governorates of Iraq, 1997 - 1999

Year	Hospitals	Public Medical Clinics	Other Health Establishments	Hospital beds	Hospital In-patients	Hospital In-patients days	Hospital Average Bed Occupancy	Pharmacies	Laboratories
1998	196	320	1,338	30,022	1,334,536	4,894,426	44.6	2,851	432
1999	197	336	1,350	N/A	N/A	N/A	N/A	N/A	N/A

Source: Central Statistical Organization

Data on Selected Health Resources in Hospitals & Other Health Establishments in 15 Center/South Governorates of Iraq, 1998 - 1999

Year	Specialists	General Practitioners	Dentists	Pharmacists	Para-medicals	Nurses	University Nurses	Dressers	Total
1998	2,891	8,155	2,072	2,006	32,917	10,392	414	1,439	60,286
1999	3,028	7,804	2,093	2,044	34,701	10,342	456	1,389	61,857

Source: Central Statistical Organization

The International Committee of the Red Cross (ICRC) supports six (6) orthopedic centres in Iraq: Under the MOH (Orthopaedic and Medical rehabilitation Centre in Baghdad, Orthopaedic Centre in Basrah & Orthopaedic Centre in Najaf), Under the Ministry of Defense (Ibn Al Kuff Orthopaedic and Rehabilitation Centre in Baghdad), Under the Iraqi Red Crescent Society (Orthopaedic Centre in Mosul) and managed by the ICRC (Orthopaedic Centre in Erbil).

II. Trends in Malnutrition in Under 5 Year Olds

According to UNICEF survey data (1991 – 2002) on malnutrition prevalence in Under 5 year olds for the Centre/South of Iraq, the percentage of general malnutrition has gone down from 23.4 % in 1996 to 9.4 % in 2002 whereas there has been substantial reductions in the percentage with stunting from 32 % in 1996 to 23.1 % in 2002 and the percentage with wasting from 11 % in 1996 to 4 % in 2002. (See the following table).

Malnutrition Prevalence in Under 5 year olds from UNICEF Surveys in Centre/South of Iraq, 1991 – 2002.

Date of UNICEF Survey	% of General Malnutrition (low weight for age)	% with Stunting (low height for age, reflecting chronic malnutrition)	% with Wasting (low weight for height, reflecting acute malnutrition)
1991 *	9.0	18.0	3.0
AUGUST 1996 **	23.4	32.0	11.0
APRIL 1997 ***	24.7	27.5	8.9
MARCH 1998 ****	22.8	26.7	9.1
APRIL 1999 *****	21.3	20.4	9.3
2000 *****	19.5	30.0	7.8
2002 *****	9.4	23.1	4.0

Sources:

- * “Health and welfare in Iraq after the Gulf crisis”, International study team (Harvard University: 9,034 households.
- ** Multiple Indicator Cluster Sample (MICS-1996), UNICEF, CSO and MOH: 6,375 households.
- *** Survey of Under Fives for Polio Immunization Days PHCs
- **** Survey of Under Fives with Polio Immunization Days at the same PHCs
- ***** PHCs Based Survey
- ***** Multiple Indicator Cluster Survey 2000 (MICS-2000), UNICEF, CSO & MOH: 13,430 households.
- ***** Household Nutrition Status Survey, UNICEF, CSO & MOH: 19,200 households

With regard to the nutritional status of children under five years of age, significant achievements have been made in the three northern governorates since the inception of the programme. (See the following table)

Malnutrition of Children under five years of age in the three Northern Governorates of Iraq (percentage), 1994 - 2001

Year	Underweight	Severely Malnourished	Chronically Malnourished
1994	25.8	4.2	37.3
1996	19.3	3.8	26.3
2001	10.7	3.0	11.4

Source: Survey Results (Report of the Secretary-General S/2001/1089 and dated 19 November 2001)

III. Non-Communicable Diseases

In the Centre/Southern Governorates, the WHO has reported that the MOH registered, among others, a total of 1,046,385 chronically ill patients with non-communicable diseases in 1998 with the following breakdown: 323,130 with hypertension; 121,219 with asthma; 436,355 with heart diseases; and 165,681 with diabetes mellitus.

The MOH has reported that from 1976 – 1994, approximately 99,382 new cases of cancer were registered over the 19 years (56, 338 in males or 56.69 % and 43,044 in females or 43.31 %).

Annual Number of Registered New Cases of Cancer in Iraq, 1989 – 1994

YEAR	TOTAL NUMBER OF REGISTERED CASES	CASES IN MALES	PERCENTAGE IN MALES	CASES IN FEMALES	PERCENTAGE IN FEMALES
1989	7,481	4,111	55.00	3,370	45.00
1990	7,058	3,913	55.00	3,145	45.00
1991	5,720	3,125	54.63	2,595	45.37
1992 *	8,526	4,735	55.54	3,791	44.46
1993 *	8,471	4,632	54.68	3,839	45.32
1994 *	7,785	4,230	54.34	3,555	45.66

Notes: * Includes total numbers from Mosul Cancer Registry.

Source: WHO publication with MOH data.

Over the period 1992 – 1994, the 10 most frequent types of cancer (both sexes) according to primary site were, from higher to lower: breast, bronchus and lung, urinary bladder, non-Hodgkin's lymphoma, larynx, leukemia, skin, brain and other central nervous system, stomach and Hodgkin's disease.

Over the period 1992 – 1994, the 10 most frequent types of cancer (male) according to primary site were, from higher to lower: bronchus and lung, urinary bladder, larynx, non-Hodgkin's lymphoma, leukemia, skin, stomach, brain and other central nervous system, prostate and Hodgkin's disease.

Over the period 1992 – 1994, the 10 most frequent types of cancer (female) according to primary site were, from higher to lower: breast, leukemia, non-Hodgkin's lymphoma, skin, bronchus and lung, urinary bladder, ovary, brain and other central nervous system, larynx and cervix uteri.

Iraqi medical authorities report that leukemia, in general, is 6 times higher than reported cases in 1989 and is 10 times higher in the southern Governorates. MOH reported possible causes include depleted uranium clad shells used during the Gulf War.

IV. Surgical Operations and Laboratory Examinations

Official figures on surgical operations and laboratory examinations from the Ministry of Health regarding the Centre/South of the country since the start of the humanitarian programme have yet to show a significant increase related to MOU inputs. Field observation has reported increased resources for diagnosis and treatment as well as its day to day use.

Information for the whole of 2002 received from MOH shows that when compared to similar information of 1997 (start of the humanitarian programme), laboratory investigations had increased by 28 % and major surgical operations by 54 %.

V. Health Facilities in Iraq, 2003

Health Facility Category	Total # of sites (Countrywide)	Total # of sites in Center/South	Total # of sites in Northern governorates
I. PUBLIC HEALTH FACILITIES RECEIVING PATIENTS			
Public Hospitals	166	119	47
Specialized Centres	90	66	24
Dental Health Centres	17	14	3
Laboratory Dental Industry	7	5	2
Primary Health Centres	1,641	1,012	629
Dispensary Health Laboratory	893	893	Not Applicable
Subtotal	2,814	2,109	705
II. SEMI-PRIVATE AND PRIVATE HEALTH FACILITIES			
Public Clinics	361	346	15
Health Insurance Clinics	323	292	31
Chronic Illness Pharmacies	205	160	45
Al-Bilad Al-Shuada Pharmacies (for rare drugs)	31	31	Not Applicable
Private Hospitals	73	61	12
Private Pharmacies	3,052	2,939	113
Private Clinical Laboratories	490	400	90
Subtotal	4,535	4,229	306
III. PUBLIC HEALTH FACILITIES FOR QUALITY ASSURANCE AND/OR ENVIRONMENTAL SAFETY			
National Quality Control Laboratory	1	1	There is one QCL for the country
General Public Health Laboratory	18	15	3
Medical Research Facilities	12	12	Not Applicable
Forensic Protection	5	5	Not Applicable
Environment Medical Supply	2	2	Not Applicable
Endemic Diseases	2	2	Not Applicable
Subtotal	40	37	3
IV. DRUG PRODUCTION FACILITIES			
Samara Drug Industries (SDI) HQ & Main Plant at Samara, Salah Aldin Governorate	1	1	Not applicable
Ninewa Drug Industries (NDI) Drug Project at Mosul, Ninewa Governorate	1	1	Not Applicable
NDI Factory for IV Products at Mosul, Ninewa Governorate	1	1	Not Applicable
SDI Syringe Factory at Babylon Governorate	1	1	Not Applicable
SDI Factory for Production of Medical Gases at Baghdad	1	1	Not Applicable
SDI Medical Glassware Production Workshop/Scientific Glassware Factory	1	1	Not Applicable

at Baghdad			
Ministry of Industry & Minerals (MOIM) Medical Cotton/Gauze Factory at Baghdad	1	1	Not Applicable
Arab Company for Antibiotics Industries (ACAI) HQ in Baghdad and Production Plant at Wassit Governorate	1	1	Not Applicable
MOIM/Veterinary Drug Research & Production Center (VDRPC) for Poultry Products of the Animal Health subsector of the Agriculture Sector	1	1	Not Applicable
Subtotal	9	9	Not Applicable
V. WAREHOUSES			
MOH/Kimadia Central Warehouses for Public Sector	6	6	Not Applicable
MOH/Kimadia Central Warehouses for Private Sector	2	2	Not Applicable
Kimadia Intermediate Warehouses for Private and Semi-private Sector	5	5	Not Applicable
Governorate DOH Warehouses	21	18	3
Subwarehouses for Private Pharmacies	70	70	Not Available
Subwarehouses for Public Clinics	15	15	Not Available
Subwarehouses for Health Insurance Clinics	15	15	Not Available
Health Sectors	70	70	Not Applicable
Subtotal	204	201	3
GRAND TOTAL	7,602	6,585	1,017

Source: MOH/KIMADIA, MOI/SDI, ACAI, WHO and UNOHCII.

VI. Additional Health Related Data

Life Expectancy at Birth in Iraq, 1989 - 1996

Reported Number of Years

1987: 62.5

1988: 64

1989: 63

1990: 63.9

1991: 62

1992: 60.6

1993: 60.3

1995: 58

Source: Human Development Report and UN Sources.

Infant Mortality Rate in Iraq, 1989 - 1999

Reported Rate per 1,000 Live Births

1987: 64.1

1990: 61.7

1993: 96.3

1994: 111.7

1995: 129

1999: 107.9*

Source: Human Development Report 1995 and Report of the Second Panel Concerning the Humanitarian Situation in Iraq, 30 January 1999. * Maternal and under 5 Children Mortality Survey, 1999.

Maternal Mortality Rate in Iraq, 1989 - 1999

Reported Rate for 100,000 Live Births

1989: 50

1990: 117

1994: 130

1997: 117

1999: 294

Source: Human Development Report 1995, UNICEF and Report of the Second Panel Concerning the Humanitarian Situation in Iraq, 30 January 1999.

Reported Number of Deliveries in Government Hospitals in Iraq, 1990 – 1998

1990: 580,000

1998: 231,000

Source: WHO

Under 5 Mortality Rate in Iraq, 1989 – 1999

Reported Rate per 1,000 Live Births

1989: 30.2

1997: 97.2

1999: 130.6 *

Source: Report of the Second Panel Concerning the Humanitarian Situation in Iraq, 30 January 1999.
* Maternal and under 5 Children Mortality Survey, 1999.

Reported Acute Respiratory Infection Prevalence per 10,000 Population Under 5 in Iraq, 1990 – 1998

1990: 5,708

1994: 7,646

1996: 7,122

1998: 6,650

Source: WHO

Reported Diarrhea Cases per 10,000 Under Five in Iraq, 1990 – 1998

1990: 3,620

1994: 3,703

1996: 3,851

1998: 3,912

Source: WHO

Reported Diarrhea Case Fatality Rate per 1,000 in Iraq, 1990 – 1998

1990: 1.6

1994: 17.3

1996: 17.6

1998: 19.3

Source: WHO

Reported Cases of Tuberculosis in Iraq, 1987 – 1998

1987: 4,753
1988: 13,394
1989: 14,350
1990: 14,735
1991: 13,527
1992: 12,355
1993: 19,005
1994: 19,581
1995: 26,882
1996: 29,196
1997: 26,607
1998: 29,410
1999: 29,897
2000: 25,251
2001: 11,413

Source: WHO/RA Report

Reported Acute Respiratory Fatality Rate per 1,000 Cases in Iraq, 1990 – 1998

1990: 1.06
1994: 7.19
1996: 8.89
1998: 11.74

Source: WHO

Reported Cases of Mental /Psychological Disorders from Outpatient/Health Centre Attendance in Iraq, 1990 – 1998

1990: 197,000
1994: 220,000
1998: 507,000

Source: WHO

Reported Number of Outpatient and Health Centre Consultations in Iraq, 1990 – 1998

1990: 36,000,000
1998: 79,000,000

Source: WHO