





#### FINAL NARRATIVE REPORT IRFFI/UNDG IRAQ TRUST FUND (UNDG ITF)

Participating UN Organ	nization(s)	Sector(s)/Area(s)/Theme(s)
World Health Organizati	on (WHO)	<i>Old Cluster</i> : D – Health and Nutrition <i>New Sector</i> : Health and Nutrition
Programme/Project Tit	le	Programme/Project Number
Emergency Public Health Assistance to Iraq: Strengthening Non-Communicable Diseases and Mental Health Control and Prevention Programme		D2-05
Programme/Project Bu	dget	Geographic Scope
UNDG ITF:	USD 11,000,000	National coverage
<b>T</b> : 1D (D )		
Final Programme/ Proj	ect Evaluation	<b>Programme/Project Timeline/Duration</b>
Evaluation Done Dyes Evaluation Report Attack		Overall Duration 21 <sup>st</sup> September 2004 – 31 December 2008 Original Duration 21 <sup>st</sup> September 2004 – 21 September 2005 Programme/ Project Extensions 1 <sup>st</sup> Request: Extension until February 2006 2 <sup>nd</sup> Request: Extension until 30 June 2006 3 <sup>rd</sup> Request: Extension until 31 December 2007 4 <sup>th</sup> Request: Extension until 31 December 2008
Main Implementing Partner:		Report Number:
		ATLAS Project Number: 66886
Iraq/Ministry of Health (MC	DH)	ATLAS Award Number: 54886

#### **Report Formatting Instructions:**

- Number all sections and paragraphs as indicated below.
- Format the entire document using the following font: 12 point, times new roman & do not use colours.

#### FINAL NARRATIVE REPORT

#### I. PURPOSE

a. Provide a brief introduction to the programme/ project (*one paragraph*)

The main goal of the Strengthening Non-Communicable Diseases (NCD) and Mental Health (MNH) Control and Prevention programme is to improve the prevention and control activities of Non-Communicable Diseases and Mental Health services with special focus on integrating them within the Primary Health Care (PHC) system and with an emphasis on community based initiatives in Iraq. The developmental goals for the project are to contribute to the reduction of mortality and morbidity due to Non-Communicable Diseases which constitute the main causes of death among adult population and morbidity due to mental health disorders of the crisis affected population in Iraq.

b. List programme/project outcomes and associated outputs as per the approved project document.

#### The expected outcomes of the programme are as follows:

- Enhanced surveillance systems that will provide data on a regular basis in the areas of hypertension, diabetes, cancer, violence and injury to guide ongoing policy development and provision of health care services;
- Enhanced health activities to promote the prevention of NCD and MH within the community;
- Services for prevention and control of blindness initiated.

#### The expected outputs of the programme are as follows:

#### Non-Communicable Diseases

- Standardized baseline data on common NCD risk factors and causes of injuries established; a surveillance system for cardiovascular diseases, cancer, diabetes and injuries and violence established; integration of hypertension and diabetes management into primary health care established;
- The national cancer registry system strengthened;
- Community awareness about risk factors and early detection of cardiovascular diseases and cancer upgraded;
- A multi-sectoral committee and plan for the promotion of healthy lifestyles and primary prevention of NCDs established;
- Health services for rheumatic fever and rheumatic heart disease introduced and implemented with referral system;
- Services for control and prevention of blindness strengthened with a focus on primary eye care; baseline data on prevalence of blindness established.

#### Mental Health

• Situation analysis of mental health needs assessed; the functioning of existing mental health facilities strengthened; training to improve the quality of mental health care within primary health care implemented; services for the prevention and management of common disorders provided; mental health services in schools established.

#### Substance Abuse

• Situation analysis about substance abuse assessed and flow of data established.

c. List the UN Assistance Strategy Outcomes, MDGs, Iraq NDS Priorities, ICI benchmarks relevant to the programme/ project.

#### UN Assistance Strategy for Iraq

This program relates to the following areas of the UN Assistance Strategy 2005–2007 for Iraq:

- Assistance in the development of human capacity among health professionals;
- Support to Iraq/MoH in the delivery of an integrated primary health care package;
- Targeted technical and financial assistance for the control of communicable and non-communicable diseases including support for the continued improvement of MoH disease surveillance system;
- Provision of technical assistance to the development of mental health and psycho-social support services at the primary health care level;
- Support to Health promotion/disease prevention programs and activities for health service providers and the community with emphasis on vulnerable groups.

#### National Development Strategy:

There are five areas of action identified in the National Development Strategy for Iraq 2007-2010 which were addressed by this programme:

- 1) Meeting urgent needs and improving services;
  - Addressing shortages in medicines and urgent supplies,
  - Strengthening disease surveillance systems,
  - Meeting the most urgent rehabilitation needs.
- 2) Strengthening results based management;
- 3) Developing and implementing a four year plan for reconstruction;
  - Developing standards for rehabilitation and new construction.
- 4) Training and capacity building;
  - Strengthening capacity in public health and related areas,
  - Training in clinical skills.
- 5) Mobilizing resources;
  - Improving information on current status and needs.

This programme serves the country at two levels; 1) the developmental level in terms of long term capacity building and policy formulation and 2) the humanitarian level which provides immediate access to vulnerable populations.

#### UN Millennium Development Goals (MDGs):

Promoting and encouraging respect for human rights and for the fundamental freedom for all without distinction to race, sex, language or religion is one of the primary purposes of the UN. Guided by these principles, this programme was designed using a human rights based approach that includes the following rights:

- The right to health;
- The right to a healthy environment;
- The right to efficient health technology;
- The right to access quality care.

As a result, the programme will contribute to the following UN Millennium Development Goals (MDGs):

- Poverty reduction (MDG 1)
- Promote gender equality and empower women (MDG 3).
- Combating major diseases (MDG 6)
- d. List primary implementing partners and stakeholders including key beneficiaries.
  - **Government Agencies:** WHO's major implementation partner is the Ministry of Health. All WHO programs are implemented by MoH staff with the active participation of WHO national staff in Iraq who are considered experts at the international level. Other ministries are those of Education, Higher Education, Environment, Human Rights, Municipalities and Public Works, Agriculture, Interior, Finance, youth and sports, women affairs, civil society and Planning.
  - **UN Agencies:** WHO is working in close collaboration with UN Health Cluster members including UNICEF, WFP, UNIDO and UNOPS.
  - **Development Agencies**: WHO has a close working relationship with several development partners such as USAID, EC and others from whom funds are provided bilaterally.
  - International and local NGOs: A number of organizations were involved in the implementation of this programme including international NGOs e.g. Christian Blind Mission (CBM), the Heartland Alliance, Diakonia, Movimondo and Together.
  - **Private Contractors**: A number of private contractors were hired for the rehabilitation and construction of mental health facilities including the Imar Company, Al Bayena Company, Al Baqee & Areedo, Rasheed Company, Aumed Company, Al Hawra Company, Salwan Amjad, Al Mahdy, Al Aemar Al Hadeeth, Al Alwah Company, Mohammed Salman, Khudier Abbas and Al Nawars.

The Iraqi population as a whole has benefited from various public health control activities of this program through support in the following areas: rheumatic fever control; improved screening of hypertension and diabetes; rehabilitation of existing psychiatric units; construction of new psychiatric units; surveys work in areas of mental health and substance abuse; control of blindness; provision of essential medical supplies and equipment; violence and injury surveillance.

The health sector benefited from this programme through the training of approximately 6,224 health care professionals who attended meetings, workshops inside and outside Iraq; in addition

to fellowships outside Iraq. The number involves 5,184 in the prevention and control of NCDs and 1,040 in the areas of mental health and substance abuse. Please see the following tables.

Topic	2005	2006	2007	Total	Remarks
Mnetal Health	45	28	0	73	Fellowships took place in the UK, Jordan, Egypt, Bahrain, and Lyon (France)
Substance Abuse		11		11	Fellowships took place in Egypt
Cancer registry		1	4	5	Fellowships took place in Jordan and Lyon.
Ca Breast		22		22	Fellowships took place in Egypt
Integration of NCDs inot PHCs		22		22	Fellowships took place in the UK
Tobacco Cessation	1			1	Fellowships took place in Thailand
Total				134	

No of fellowships outside Iraq in external training centres 2005-2007

Participation of Iraqi candidates in confrences and meetings conducted outside Iraq 2004-2007

Topic	2004	2005	2006	2007	Total	Remarks
Mnetal Health	8	36	2		46	Participation took place in the
						UK, Jordan, Egypt, Ireland, and
						Iran
NCD		4	2	3	9	Participation took place in Egypt,
				_	-	Jordan and Saudi Arabia.
Cancer and Cancer		1	1		2	Participation took place in Jordan
registry						and Lyon.
Blindness		2	4		6	Participation took place in Jordan
Dimaness		2	4		0	1 I
TFI/FCTC				4	4	Participation took place in
						Thailand
Human Rights		3			3	Participation took place in Jordan
Total					70	

Topic	2004	2005	2006	2007	2008	Total
Mental Health	2	4				6
NCD		24	10	21	43	98
Diabetic		1				1
Retinopathy						
Rheumatic Fever					14	14
Physical activity		1				1
Cancer Palliative		1				1
care						
Cancer Registry				2	2	4
Cancer Breast		1		1	6	8
Blindness and		1		1	6	8
Primary eye care						
Tobacco control		8		1		9
Substance abuse	26	1				27
Injury surveillance			2			2
Human Rights	1	1				2
CIDI and IFHS	1	10	6			17
First Aid	1					1
Clinical	1	1				2
Malnutrition						
Landmine victim			1			1
surveillance						
IATA regulations					1	1
on shipment of						
medical samples						
Total						203

No of workshops and meetings conducted inside and outside Iraq 2004-2008

Finally, this programme has contributed to employment generation through the rehabilitation and construction of 13 psychiatric facilities by providing a total of 9,113 job opportunities. An estimated 621,1923 people are expected to benefit by services provided by these facilities.

#### II. ASSESSMENT OF PROGRAMME/ PROJECT RESULTS

a. Report on the key outputs achieved and explain any variance in achieved versus planned results. Who have been the primary beneficiaries and how they were engaged in the programme/ project implementation?

#### Non-Communicable Diseases

**Output #1:** Standardized baseline data on common NCD risk factors and causes of injuries established; a surveillance system for cardiovascular diseases, overweight and Obesity, diabetes, cancer; injuries and violence established; integration of hypertension and diabetes management into primary health care established; – 100% achieved.

#### 1.1. Survey on Risk Factors of Chronic Non-Communicable Disease in Iraq: This survey was

conducted in early 2006 as an integrated effort between Ministry of Health and Ministry of Planning and Development Cooperation/Central Organization for Statistics and Information Technology (COSIT) in collaboration with WHO. The WHO standard STEPwise approach was used to build up baseline data on the prevalence of risk factors for Non-communicable

diseases which was conducted in Iraq for the 1st time using the resources of this program.

The survey was conducted in 17 governorates including Kurdistan region (Except Erbil). More than 400 field workers from the directorates of health along with members of COSIT in the governorates participated in data collection.

The report of the survey which was published in 2007, presents the main results in regard to the contributory risk factors. Results showed that 40.4% of those included in the survey had high blood pressure, 10.4% had hyperglycemia, and 37.5% had hypercholesterolemia. Also, 66.9% were overweight, 21.9% were smokers, 90.1% had low fruit and vegetable consumption and 56.7% had low physical activity.

#### 1.2. Surveillance system for cardiovascular diseases, cancer, diabetes and established; The

limited availability of data regarding the prevalence of NCDs makes it difficult to know the true

magnitude and trends of these disease and their risk factors. In order to develop and implement effective NCD prevention programmes, it was necessary to create a reliable data surveillance system. The collection of NCD baseline data through the Chronic Non-Communicable Disease Risk Factors Survey was one of the first steps in this process and as mentioned in details in section 1.1 above. Through the survey process, most NCD focal points in the centre and governorates received training on NCD surveillance.

A Standardized framework for the surveillance of cardiovascular diseases, cancer and diabetes was established with technical support by W.H.O in 2007.

Another important strategy in establishing a surveillance system for NCDs at PHC level was the implementation of screening program for Hypertension and Diabetes which aimed at early detection of the 2 chronic diseases. This new

strategy provided MOH with nationally representative data on the trends of the two diseases on monthly basis. More information is provided in the following section.

**1.3. Screening of Hypertension and Diabetes at PHC level;** Through this programme, an official implementation of screening of Hypertension and Diabetes has taken place in (41) PHC centers in the governorates of centre and south in October 2008 and at the DoHs of Kurdistan region in November 2008. WHO committed \$85,131 for training activities and \$169,599 to support logistics, staff costs including overtime and monitoring of screening activities. Local competency based training workshops were implemented by the NCD focal points in the DOHs for the physicians and the other assigned health workers, laboratory and administrative staff working in the selected screening PHC. The training included clinical aspects of the work in addition to discussion of the job description of the work team. It also included field implementation and assessment. Around PHC staffs were trained. Local laboratory sites were selected and laboratory supervisors were assigned to train and supervise the screening PHC labs. Central workshops were also carried out at the Central Public Health Lab for laboratory supervisors to discuss supervisory tools.





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In addition, WHO provided the involved PHC centers with the necessary laboratory equipment (UV Spectro-Photometers) and Lab supplies for the detection of Diabetes Mellitus; in addition to the provision of new sphygmomanometers for the measurement of blood pressure and new Elector-cardiographs (ECGs).



Hypertension screening in Dohuk in 2008



Practical training of health staff in 2008

During the preparatory phase in May 2008, the screening program was tested in two pilot areas in Baghdad (Resafa) where 43 medical and health support staff from the selected PHC (20 males and 23 females) have attended a training workshop which was followed by a ten days practical screening implementation and data collection training.

Moreover, before the implementation of the screening project, 3-5 workshops were conducted in each governorate to train all staff members of the involved PHCs on the new guidelines and instructions.

National guidelines for the management of hypertension and diabetes were developed, published and distributed in 2008 to PHC physicians all over Iraq and physicians working at public clinics. The project expanded in 2009 to 25% of main PHC at directorates of health with the financial support of the Ministry of health and DoHs. Follow-up and monitoring is carried out through central and local supervision and meetings with focal points. Reports are submitted to higher authorities according to whom interventions are made.

In the area of integration with secondary care level, arrangements are made to train the PHC physicians and the health paramedical personnel at the hospitals within the catchments areas under supervision of specialist at the cardiovascular and the diabetes clinics and ophthalmology departments.

**1.3. Injury surveillance:** This project has made significant steps towards the establishment of injury surveillance system at the national level in Iraq. Under WHO support, one (3 days) workshop was conducted in each of the governorates of Baghdad/Resafa, Erbil, Basra and Kerbala in 2008, in addition to central workshop at MOH/HQ to central supervisors. The above was preceded by a workshop to discuss the national strategy on the prevention of violence and injuries which was conducted in Amman in December 2007 for representatives form Ministry of Health, Ministry of Higher Education, Ministry of Labor and Social Affairs, Ministry of Interior, Ministry of Human Rights, Ministry of Education and Ministry of Awqaf and religious affairs. The above capacity building activities were followed by the establishment of 4 sentinel sites that ensure regional representation of the country and expected to generate valid information on the causes and prevalence of domestic injuries in Iraq.

Output #2: The national cancer registry system strengthened; – 100% achieved.

**2.1. Cancer Registry System:** The cancer registry system was strengthened through the conduction of 2 central workshops conducted in 2008 to cancer registry focal points in all DOHs on the improvement of the cancer registry system which were attended by 33 concerned physicians (28 males and 5 females), 11 of whom were from DoHs other than Baghdad.

WHO also supported the training of 4 Iraqi doctors on Cancer Registry in Amman, Jordan in February-March 2007. In addition to 4 workshops inside Iraq for physicians from Basra, Najaf and Mosul on data collection and analysis to strengthen population based cancer registry pilotted there. Moreover, WHO has provided support to print, publish and distribute a manual on the prevalence of all Iraq/MOH's hospital-registered cancer cases as per cancer registry unit records uptill 2004.

Initial plan for strengthening the national cancer registry system was drafted in 2007

It is worth noting that six MoH physicians and nurses attended a training course on palliative care for cancer patients in 2005.

**Output #3:** Awareness about risk factors of cardiovascular diseases and cancer increased and the early detection of cancer maintained; – 100% achieved.

#### 3.1. Community Awareness about the Risk Factors of Cardiovascular Disease:

NCD management and control has been integrated within PHC activities including healthy lifestyle modification. No substantial data were received in regard to the implementation of this activity.

#### 3.2. Community Awareness on Cancer Control:

It is worth noting that a questionnaire on the Knowledge, Attitudes, and Practice (KAP) about the harmful effects of smoking was formed with the support of WHO and piloted on a random sample of MOH employees. In addition, Iraq has participated in the Global Health Professional Survey (GHPS). Kurdistan region has completed the survey and published a fact sheet with the help of CDC/Atlanta through the WHO. WHO/Iraq started a close collaboration with Ministry of Women and conducted various awareness and advocacy meetings and workshops on Ca breast utilizing funds from other projects.

**3.3. Early Detection of Breast Cancer:** Knowledge regarding the early detection of breast cancer was maintained through a series of trainings throughout the course of the programme. In 2008, 5 special workshops were provided to 150 female PHC physicians regarding the early detection of breast cancer including the self brest exam and physical breast exam.

WHO supported one five days workshop in Erbil in April 2007 on the effectiveness of physical breast exams and breast self exams in the screening of breast cancer. The objective of the workshop was to determine whether a physical exam of the breast combined with breast self exams performed once a year by trained professionals can reduce the incidence of breast cancer. The workshop was guided by one international STC, 5 national facilitators and attended by 80 participants.

In 2006, WHO supported 33 fellowships (15 males and 18 females) to Cairo regarding the early detection of breast cancer and installed equipment and lab supplies for the early detection of breast cancer and cervical cancer in clinics in Baghdad and other governorates.

**Output #4:** A multi-sectoral committee and plan for the promotion of healthy lifestyles and primary prevention of NCDs established.

National multi-sectoral committees are established in the areas of Tobacco control, promotion of physical activity, prevention of blindness and visual impairment and breast cancer. -100% achieved.

**4.1. Integration of NCD Care into PHC Services**: Several meetings were held over the course of this programme by the NCD Multi-sectoral Task Force Steering Committee and Executive working teams. Participants from the following agencies were involved: Ministry of Health. Other line ministries such as the Ministry of higher Education and Scientific Research, Ministry of Labor and Social Affairs, Ministry of Education, Ministry of Interior, Ministry of Agriculture, Ministry of Human Rights, and other government offices not affiliated to ministries.

In 2007, a national committee was established to publish national guidelines for chronic NCDs.

In 2006, a national symposium was held on the integration of NCD control activities within primary health care services with the participation of 20 specialists in internal medicine, community medicine, laboratory and technical affairs and higher education participating. The objectives were to discuss the problem of NCDs in Iraq, the training schedules required for the PHC physicians, the levels of care required for NCD patients, and the guidelines for referrals.

**4.2. Capacity Building:** In August and September 2008, 40 competency based training workshops were conducted by NCD focal points in 19 DoHs for 890 PHC staff (562 males and 328 females). Workshops included clinical aspects as well as field implementation and assessments. PHC staff included physicians, other assigned health workers and laboratory and administrative staff.

WHO supported 19 NTAs workshops in 2007 to enhance the capacities of concerned staff in 19 DOHs on the integration of NCD into primary health care. The main focus of these workshops was the early detection of hypertension, diabetes and breast Cancer.

In 2006, twenty fellows were trained in the UK. The training fellowship which was a clinical course had the following learning objectives: 1) to update candidates on best clinical practices to control and manage NCDs within primary health care services; 2) to explore modern methods to manage chronic disease clinics outside of hospitals; 3) to learn best practices of identifying risks factors which may lead to chronic diseases; 4) to learn best practices of the prescription and management of medicine and 5) to develop a framework for monitoring and evaluation suitable to Iraq.

**Output #5:** Health services for rheumatic fever and rheumatic heart disease introduced and implemented; – 100% achieved.

**5.1 Rheumatic Fever Control (RF):** The control of rheumatic fever and rheumatic heart disease was strengthened through a series of trainings throughout the course of the programme. Local training activities were conducted at the governorate level in 2008 to strengthen rheumatic fever control. 13 workshops were hold in 13 DoHs attended by 172 medical and health support staff including nurses and Paramedicals (112 males and 60 females).

In 2007, 8 workshops were attended by PHC physicians and nurses in more than 60 PHC centers covering different aspects of rheumatic fever/rheumatic heart disease prevention and control. These aspects included clinical aspects, evidence based management protocol and interpersonal communication skills.



Training workshop on RF in Wassit



Training workshop on RF in Dohuk

**Output #6:** Services for control and prevention of blindness strengthened with a focus on primary eye care; – 100% achieved.

**6.1. Procurement of Essential Diagnostic Equipment**: As part of improvement of primary eye care, a total of 22 Community vision centers have been established all over Iraq to provide eye care by ophthalmologists and refractionists. The centers were equipped with basic diagnostic equipment and supplies by WHO. The ophthalmologists and refractionists working at these PHC centers were engaged in practical training at the hospitals under supervision of specialists. In addition, other equipment was supplied to specialist eye hospitals which included ophthalmic argon lasers with full accessories, microscopes, light-direct ophthalmoscopes, indirect ophthalmoscopes and binoculars. The total value of this equipment is amounted to \$623,056. WHO has also supported a workshop in Amman to some selected Ophthalmologists on the treatment of Diabetic Retinopathy by Laser in October 2005.

**6.2. Capacity Building in Eye Care:** Ophthalmologists and refractionists working at Community vision centers that were fully equipped by WHO procurements have been trained under the supervision of specialists. In 2008, 191 physicians (137 males and 54 females)

participated in 13 workshops at PHC centers which were held in 13 DoHs.

Trainings on primary eye care were conducted in Baghdad, Ninewa and Basra in 2007 (as seen in picture to the right) and Ninewa in 2006.

During 2008, four training workshops were conducted for school teachers concerning the early detection of visual impairment in children in Baghdad (Kerkh), Baghdad (Resafa)

and Diala. The workshops were attended by 66 primary school teachers (37 males and 29 females).

**6.3. Rapid Assessment for Avoidable Blindness (RAAB):** The primary objective of this assessment was to establish a baseline data on the causes of blindness and visual impairment in

Iraq in order to fulfil an obligation towards the "Vision 2020 Initiative." This assessment was conducted in the districts of Sulaimaniya and Basra as a starting point in 2008. Preliminary report is prepared and submitted to higher authority and to WHO. Efforts are made to improve cataract surgery coverage based on the results. Plans are made to extend RAAB to other areas of Iraq to give an estimate for the prevalence of blindness and visual impairment in Iraq.



Vision screening in Sulaimaniyah in 2008



**RAAB** training in Sulaimaniya in 2008

**6.4. Public Awareness Activities:** Global Vision 2020 Day was celebrated at the Ibn Al Haitham specialist ophthalmic hospital with representation in 2006. Global Vision 2020 Day is celebrated each year at central level as well as at DoHs. Several folders and posters on eye health are produced by MOH and distributed to PHCs, health promotion units at hospitals and schools, also few TV spots are produced.

#### Mental Health

**Output #1:** Situation analysis of mental health needs assessed; the functioning of existing mental health facilities strengthened; training to improve the quality of mental health care within primary health care implemented; services for the prevention and management of common disorders provided; mental health services in schools established; – 100% achieved.

A number of initiatives were implemented in regard to mental health care through this programme. Details regarding these initiatives are provided below.

**1.1. WHO-AIMS Report on the Mental Health System in Iraq**: The primary goal of this report which was published in 2006 was to collect information regarding the mental health system. This information will enable Iraq to develop information-based mental health plans with clear baseline information and targets. It will also be useful to monitor progress in the implementation of reform policies, provision of community services and involvement of users, families and other stakeholders in mental health promotion, prevention, care and rehabilitation.

**1.2. Fifteen Focused Mental Health Assessments:** Fifteen research projects were undertaken in 2006 to examine the magnitude of mental health problems in specific population groups and the impact of the mental disorders in terms of quality of life of ill persons. These projects were the result of the training of research methodology and are listed below:

- 1) Prevalence of post traumatic stress disorders in primary school children in Baghdad;
- 2) Quality of life of outpatients with schizophrenia from rural and urban areas in Iraq;
- 3) Prevalence of psychiatric morbidity among plastic surgery patients with mutilated ears;
- 4) Prevalence of depression during pregnancy;

- 5) Prevalence of post traumatic stress disorders in adolescents in secondary school;
- 6) Prevalence of post traumatic stress disorder among psychiatric outpatients in the Al-Fayhaa Hospital in Basra;
- 7) Comparison of the quality of life between outpatients with schizophrenia and a sample from Baghdad's general population;
- 8) Mental health symptoms following the wars and repression in Mosul;
- 9) Prevalence of alcoholism among male emergency room attendants in two general hospitals in Baghdad;
- 10) Resettlement prospects for inpatients at the Al-Rashad Mental Hospital;
- 11) Prevalence of psychiatric morbidity among patients with dermatological diseases at the dermatological clinic;
- 12) Prevalence of anxiety and depressive disorders in primary care centers;
- 13) Rate and correlates of depression in diabetic patients in Baghdad;
- 14) Knowledge of PHC physicians in Baghdad about psychiatric medications;
- 15) Psychiatric morbidity among working children in Dohuk City.

It was concluded that there is a high need for mental care in Iraq with a special emphasis on children who exhibited high rates morbidity from ill mental health.

**1.3. 1raq Mental Health Survey (IMHS):** The Iraq Mental Health Survey (IMHS) was undertaken jointly by the Ministry of Health (MoH) and Ministry of Planning and Development Cooperation (MoP) the Ministry of Health/Kurdistan region in Iraq (MoHK) and the Kurdistan Regional Statistics Office in Iraq (KRSO).

IMHS is the first nationwide mental health epidemiological survey in Iraq and the second in the Middle East after Lebanon. IMHS was conducted in 2006/2007 along with the Iraq Family Health Survey (IFHS).

IMHS was conducted by assessing a random sample of 4,332 adults ages 18 years and older representing the Iraqi household population. The response rate reached 95.2%. The methodology of IMHS was the same as the World Mental Health Survey. Data was collected by using two survey instruments, a Self Reported Questionnaire (SRQ) and the Composite International Diagnostic Interview (CIDI).



The survey found that the lifetime prevalence of any mental health disorder was 16.5% among the Iraqi population while only 2.2% of those affected received any medical treatment. IMHS also found that women have a higher prevalence of anxiety and behavioral disorders than

men; men have higher rates of substance abuse than women; and the prevalence of mental health disorders vary between those living in urban and rural areas and across different regions in Iraq.

#### **Success Story 1: IMHS Team Encounters Resistance by Survey Population 1.4.**

South Region - The IMHS team faced a large number of rejections at the beginning of their survey activities. It was assumed that these rejections were due to a lack of knowledge concerning the overall goals of the survey.

In reposnse, the IMHS team first considered advertising information about the survey on television in order to educate the general public. However, due to security concerns and fears that advertisement may further dissuade families from participating in the survey, the IMHS team decided to meet with religious leaders instead.

As a result, special speeches concerning the importance of IMHS were delivered during Friday prayers. Fortunately for the progress of the survey, this action significantly reduced the number of rejections.

**National Mental Health Council:** The National Mental Health Council was established in 2004 to guide the development of mental health and substance abuse programmes in Iraq. Members included representatives from the following agencies: Ministry of Health (MoH), Ministry of Higher Education (MoHE), Ministry of Labour and Social Affairs (MoLSA), Ministry of Justice (MoJ), Ministry of Human Rights (MoHR), Ministry of Interior (MoI) and Ministry of Education (MoE).

The council's key areas of focus are policy development, reconstruction of mental health infrastructure, human resource development, community education and research.

The council's accomplishments included the approval of the Mental Health Act in 2005. This legislation focuses on access to mental health care including 1) access to the least restrictive care; 2) rights of mental health service consumers, family members, and other care givers; 3) competency, capacity, and guardianship issues for people with mental illness; 4) voluntary and involuntary treatment; law enforcement and other judicial system issues for people with mental illness; 5) mechanisms to oversee involuntary admission and treatment practices; and 6) mechanisms to implement the provisions of mental health legislation.

The mental health legislation was achieved in collaboration with Ministry of Justice and was reviewed by most psychiatrists in the country.

**1.5. Mental Health Care Manuals**: Two major projects were undertaken to develop manuals regarding mental health care. The first was to develop several manuals on psychological first aid for community level workers and school teachers. The focus of these manuals was to emphasize the normalcy of reactions and to increase the coping capacity of children and adults. They are available in English and Arabic.

The second project was to create a manual on the provision of mental health care by physicians through the primary health care system. Topics included 1) stigmatization of patients and staff; 2) screening; 3) treatment of patients with both physical and mental illnesses; 4) shared infrastructure leading to improved cost-efficiency; 5) potential of universal coverage and mental health care; and 6) use of community resources to partly offset the limited availability of mental health personnel.

**1.6. Provision of Essential Drugs for Mental Health Conditions:** Around US\$ 1 million worth of essential mental health drugs was purchased by WHO to the Ministry of Health for procurement. These drugs were distributed by Ministry of Health to its facilities for the treatment of depression, stress and neurological conditions.

**1.7. Rehabilitation/Construction of Psychiatric Facilities:** Iraq Ministry of Health along with support from the WHO initiated a long term capacity project to rehabilitate and construct psychiatric facilities at the national level. They are designed to be sensitive to the special requirements of psychiatric care and the unique cultural and social aspects of Iraqi society.

WHO supported the renovation of 7 mental health units in Mosul, Basra, Kerbala, Babel, Diala, Baghdad (Russafa) and Baghdad (Karkh) at a cost of US\$ 117,850.75. In addition, 6 mental health units were newly constructed in Kirkuk, Wassit, Nassirya, Najaf, Erbil, and Baghdad (Russafa) with a cost of US\$ 2,829,067.42. More details are provided in the tables below.

	Governorate	Location	Number of Beneficiaries	Cost / US\$	Name of Company	Number of workers
1	Mosul	Mosul	659345	12,155.17	Salwan Amjad	120
2	Basra	Basra	491927	15,670.00	Al Mahdy	135
3	Kerbala	Kerbala	571500	23,628.60	Al Aemar Al	168
					Hadeeth	
4	Babel	Babel	639444	14,939.94	Al Alwah Cy	90
5	Diyala	Baquba	571554	13,920.62	Mohammad	150
					Salman	
6	Baghdad	Russafa	517442	18,850.58	Khudier Abbas	120
7	Baghdad	Karkh	517442	18685.84	Al Nawars	90
	Total	7	3451212	117,850.75	7	813

Figure 2 - Mental Health Units Renovated by WHO.

	G.rate	Location	Area m2	Number of Beneficiaries	Cost / US\$	Name of Company	Number of workers
1	Kirkuk	Kirkuk	750	538392	429,372.65	Imar Cy	1400
2	Wassit	Wassit	750	360515	521,122.00 *	AlBayena	1500
						Су	
3	Thi-Qar	Nassirya	750	131527	394,274.73	Al Baqee	1600
						& Areedo	
4	Najaf	Najaf	750	641281	469,166.79	Rasheed	1100
						Су	
5	Erbil	Erbil	750	571554	479,684.40 *	Aumed	1200
						Су	
6	Baghdad	Russafa	750	517442	535,546.85	AlHawra	1500
						Су	
	Total	6	4500	2760711	2,829,067.42	6	8300

Figure 3 - Mental Health Units Constructed by WHO.

\*: The amount includes construction cost and furniture.

Each building has either eight beds or twelve-bed unit and includes a doctor's room, diagnostic department, isolation room, reception hall, open yard area and bath area.



Erbil Mental Health Unit: Main Entrance



Erbil Mental Health Unit: Patients Room

Buildings are just structures. It is the people who bring them to life.

Success Story 3: Courageous Survivor Encourages other Women and Girls to Move Past Painful Memories

Kurdistan Region - Hadar Zubair Barazani, also known as a "miracle child", is a private lawyer in Iraq and has been volunteering with WHO project to provide psychosocial services in the Kurdistan region.

In 1983, Barazani witnessed the murder of six of her family members including her father, brother, two uncles and two cousins during the Al -Anfal campaign. She was only 5 years old at the time.

The hardships confronting Barazani's road to success have been numerous. She describes herself during her early years as a "shy and fearful young girl". Nevertheless, Barazani completed a law degree from Salahaddin University in 2003 and provided legal representation to her fellow Al-Anfal victims soon thereafter.

Barazani's legal career was inspired in part by her mother for whom she feels a deep sense of love and gratitude. By watching her mother endure the tremendous pressure of raising her and her brothers on her own amidst the hardships resulting from the Al Anfal events, Barazani learned the importance of dedication and motivation in life.

**1.8. Community Mental Health Initiatives**: These initiatives began with the construction of mental health units which have been functioning out of hospitals in each governorate. Community outreach mental health activities have been established but are not functioning well. So far, its only been done by NGOs.

**1.9. Mental Health Capacity Building**: In order to better serve the mental health needs of the Iraqi population, primary health care workers went through a number of trainings in the following areas from 2004 to 2006:

- Research methodology (20 psychiatrists in 2005);
- Psychiatry update (25 professionals in 2004 in Jordan);
- Psychiatric training specifically for physicians (13 physicians in Bahrain in 2006);
- Psychiatric trainings specifically for nurses (40 nurses in Egypt in 2004; 20 nurses in Bahrain in 2006);
- National capacity building and mental health leadership (number of professionals visited in Egypt, India and the UK in 2005);

- Substance abuse trainings (3 psychiatrists in India in 2005; 7 professionals in the UK in 2006);
- Improvement of psychiatric skills specifically for medical undergraduate education professors and teachers (10 psychiatrists in the UK in 2005).

**1.10. Mental Health Education Campaign**: A large scale mental health campaign was developed by Ministry of Health with the support of the WHO to increase awareness of mental health problems and initiate community based services to the general public.

With the active involvement of mental health and media professionals from Iraq, WHO/Iraq and Regional office along with its professional media personnel, a set of 5 posters on stigma, mental disorders, psychological first aid, Schizophrenia and depression were developed along with 5 pamphlets on self-care in crisis situations, mental disorders, schizophrenia, depression and mental retardation. Examples are provided below.



**1.11. School Mental Health Initiatives**: The primary objectives of mental health initiatives implemented in the school system were as follows: 1) to raise awareness of school teachers regarding their roles in the emotional development of children; 2) to provide school teachers with a minimum knowledge to improve the process of early detection of emotional problems in children; and 3) to develop positive relationships between schools and primary health care centers.

#### **Substance Abuse**

**Output #1**: Situation analysis about substance abuse assessed and flow of data established; – 100% achieved.

**1.1. Situation Analysis of Substance Abuse**: A situation analysis about the prevalence of substance abuse was carried out through the Iraq Mental Health Survey in 2006/2007. It was demonstrated that men have a higher prevalence of substance abuse than women. Overall, the data from this survey provided baseline data from which health care professionals can set targets for future substance abuse programmes.

It is worth noting that a team of 12 mental health professionals consisting of Psychiatrists, clinical Psychologists, social workers and nurses participated in a four-week training course in Cairo in 2006 to learn how to create a hotline service. A "hotline" has been established as a well recognized method of reaching the drug using community.

Overall, as a result of this programme, Iraqi population as a whole has benefted through better informed health professionals, the increased availability of mental health facilities and larger

presence of awareness of NCDs and mental health disorders in the community. The true impact of this programme will be better measured in the future.

**b.** Report on how achieved outputs have contributed to the achievement of the outcomes and explain any variance in actual versus planned contributions to the outcomes. Highlight any institutional and/ or behavioural changes amongst beneficiaries at the outcome level.

The main contribution of the achieved output were reflected at PHC level where many PHCs have foreseen the integration of NCDs and Mental health services into PHC centres which is a significant objective of this project. Though this is not yet a generalized phenomenon but through Pilot tests of screening project for the early detection of HT and DM, in addition to Mnetal health, this has made it more feasible to be seen at national coverage.

A tremendous effort was made through the collaboration of various government agencies, UN agencies, NGOs and private contractors to achieve programme outputs despite the difficult situation posed by the security situation. The most significant variance in actual versus planned results was the time required to achieve the intended programme outcomes. Initially, the programme was to be implemented for one year, however due to a number of constraints which are explained in detail in *Section III Evaluation and Lessons Learned*, the programme was operational for a duration of 5 years.

The achieved outputs contributed significantly to addressing drug shortages, training and retraining of the work force, tackling causes of NCDs and poor mental health. Through collaboration between government agencies, UN agencies, non-governmental organizations and NGOs, it was possible to address some areas as lack of reliable health data and analytic capacity to develop effective and efficient health planning. New Medical technology in the area of NCD has been introduced and / or upgraded but no evidence exist on maintaining a quality service. As indicated above, 13 mental health units have been rehabilitated and/or constructed, however the number of those units that provide full function capacity is not known or flactuating. There were some incomplete achievements of activities and products wherby were not able to reach their benefeciaries and endusers which could be attributed to low managerial capacities and accountability in these particular critical situations in Iraq. Some examples are listed below.

- Mental health education campaign developed and printed, however with MoH and not released to the public;
- Psychological first aid manuals developed but not distributed;
- Manual for Physicians developed but not distributed.

c. Explain the overall contribution of the programme/ project/ to the ICI, NDS, MDGs and Iraq UN Assistance Strategy.

This programme has contributed to the <u>UN Assistance Strategy</u> by doing the following:

- Successful implementation of a pilot project on Hypertension and Diabetes screening;
- Rehabilitating and constructing mental health units to provide psychosocial support services and commecement of a process of integration of mental health services into primary health care level;
- Building capacity of health professionals to address blindness in vulnerable populations such as children;

- Building the capacity of health professionals in the areas of early detection of cardiovascular disease, cancer, diabetes, rheumatic fever, blindness, violence, injury, mental health and substance abuse;
- Increasing the availability of baseline data in efforts to establish an effective surveillance system to moniitor NCDs, mental health and substance abuse;

In regards to the Iraqi <u>National Development Strategy</u>, this programme has contributed to strengthenning health infrastructures in relation to NCDs and Mnetal health towards quality services through the following:

- Procurement of 1) 90,000 pieces of medical equipment, supplies, informatics equipment and accessories for NCDs, 2) over US \$1,000,000 worth of essential mental health drugs for the treatment of depression, stress and neurological conditions;
- Rehabilitating 7 exisiting psychiatric facilities and constructing 6 new psychiatric facilities;
- Building the capacity of health professionals in the areas of cardiovascular disease, cancer, diabetes, rheumatic fever, blindness, violence, injury, mental health and substance abuse;
- Increasing the availability of baseline data in efforts to establish an effective surveillance system to moniitor NCDs, mental health and substance abuse;
- Successful implementation of hypertension and diabetes screening.

Lastly, this programme has contributed to the <u>UN Millenium Development Goals</u> (MDG) by addressing MDG 3 which is to promote gender equality and empower women. Specifics are as follows:

- Training of 557 women in the areas of cancer, chronic illness, injury surveillance systems, prevention and control of blindness, mental health and substance abuse;
- Providing training to 180 female primary health care physicians on the early detection of breast cancer including a special training on how to administer self exams;
- Studying the varying effects of mental illness and substance abuse by gender through the Iraq Mental Health Survey;
- Designing seperate wards for men and women in rehabilitated and newly constructed psychiatric units.

e. Explain the contribution of key partnerships including national, international, inter-UN agency, CSO or others towards achievement of programme/ project results.

The NCD and Mental Health Prevention and Control Programme, a multi-sectoral programme requires the involvement of a number of partners for implementation. The roles and responsibilities of the most prominent partners are provided below:

- 1) **Ministry of Health (MoH):** Acted as WHO's primary implementing partner for the programme. All WHO programmes were implemented by MoH staff with the active participation of WHO national staff.
- 2) **Ministry of Planning and Development Cooperation (MoP)**: It played a significant role in sample design and selection, data collection and statistical analysis through the Central Organization for Statistics and Information Technology (COSIT);

3) **Private Contractors**: MoH hired several companies to complete the rehabilitation and construction of mental health facilities including the Imar Company, Al Bayena Company, Al Baqee & Areedo, Rasheed Company, Aumed Company, Al Hawra Company, Salwan Amjad, Al Mahdy, Al Aemar Al Hadeeth, Al Alwah Company, Mohammed Salman, Khudier Abbas and Al Nawars.

WHO is the sectariant and leading agency in the UN Health and Nutrition cluster which includes UNOPS, WFP, UNIDO, UNDP, UNICEF and others. Biweekly meetings of UN Health Cluster are led by the MoH with the participation of international organizations and donors. During these meetings, policies are discussed and proposals are endorsed. This collaboration is to prevent overlapping programmes between different UN agencies and ensure consistency.

In addition to UN agencies, WHO also worked in close coordination with several developmental agencies such as USAID and the European Commission as well as a number of international and local NGOs including the Christian Blind Mission (CBM) in the area of prevention and control of blindness.

During the course of the programme, Iraq MoH established a bureau to liaise and coordinate activities between various volunteer organizations in the areas of health. For mental health and substance abuse, MOH is coordinating with four participating international NGOs specialized in mental health. Their names and contribution are as follows: Heartland Alliance (psychosocial support to victims of violence), Diakonia (psychotherapy services in Dohuk, Erbil and Suleymania), Movimondo (psychosocial support of children in Baghdad) and Together (psychosocial support of children and families in Babylon). In the area of control and prevention of blindness, CBM international NGOs has trained staff and supporting the conduction of field surveys on the causes of avoidable blindness in Iraq. In addition to the numerous newly formed local NGOs which have not yet acquired the required professional skills to conduct highly spsecific technical health projects due to limited expertise.

A National Council for Drug Misuse was re-established and chaired by MoH. The council includes representatives from the Ministry of Interior, Ministry of Social Welfare and other committees. A program to address the issue of drug misuse was developed in collaboration with the regional WHO team and a Drug Control Law was submitted to the cabinet for approval.

On top of above, MOH is guiding, since long time, many multi-sectoral steering committees and task forces in the area of prevention and control of cancers (Cancer Board), NCDs, Prevention and control of blindness, Health, diet and Physical activities, care of elderly and others.

- e. Highlight the contribution of the programme/ project on cross-cutting issues:
  - Were the needs of particularly vulnerable or marginalised groups addressed?

There are number of examples on how this project was tailored to the needs of vulnerable populations: the school mental health programme addressed the emotional needs of children through various activities and life skills education in schools; a substantial number of Female primary health care physicians received training on early detection of breast cancer to help women administer self exams; a national school based project was established for tobacco control; and the Iraq Mental Health Survey studied socio-demographic characteristics such as age, gender, education, and income and protective factors to better plan mental health services in the future.

• How did men and women benefit from the programme/project? How was gender inequalities handled?

Both male and female health professionals were trained by this programme in all 19 governorates in Iraq.

In fact, thirty percent of all health personnel trained through this programme both inside and outside of Iraq were women. They received trainings regarding cancer, chronic illness, injury surveillance systems, prevention and control of blindness, mental health and substance abuse. In addition, a particular emphasis was placed on the training of 180 female primary health care physicians on early detection of breast cancer including a special training on how to administer self exams. Also, psychiatriatic facilities were designed to have designing seperate wards for men and women.

• Were concerns about the environment addressed? Specifically, was there an impact/risk assessment of the environment?

Environmental issues were not addressed by this program as they are beyond its objectives and expected outcomes.

• Were there any specific issues in relation to the security situation?

Many constraints were encountered while implementing and completing this project due to the complex situation present in Iraq. These constraints impeded some field work necessary for conducting epidemiological surveys, caused delays in the delivery of supplies, interfered with the movement of staff; and impeded the access of a number of international staff on UN premises in Iraq. Difficulty in movement of the trained health workers and their mal distribution was an issue of concern during the tension periods. Further details are provided in *Section III: Evaluation and Lessons Learned*.

• Did the project contribute to employment generation (gender disaggregated)?

The main employment generated by this project was the big job opportunities created during the rehabilitation and refurbishment of 13 mental health units in Iraq. It is worth noting that most of the construction/rehabilitation work was done through the MoH. It is estimated that the rehabilitation and construction of psychiatric units created about 9,113 job opportunities.

In addition to some external secretariat support to assist in the preparations and conduction of training activities inside and outside Iraq.



Figure 5 - Total number of health professionals trained from 2004 to 2008 disaggregated by gender.

f. Provide an assessment of the programme/ project based on performance indicators as per approved project document using the template in Section IV.

#### **III. EVALUATION & LESSONS LEARNED**

a. Report on any assessments, evaluations or studies undertaken relating to the programme/ project and how they were used during implementation. Has there been a final project evaluation and what are the key findings? Provide reasons if no evaluation of the programme/ project have been done yet.

A summary of assessments, evaluations and studies are provided below.

#### Chronic Non-Communicable Disease Risk Factors WHO stepwise Survey (Nationwide):

The purpose of this survey was to provide essential information and base-line data on risk factor for NCDs in Iaq in order to guide the strategic planning of the steps necessary to upgrade the activities of NCD prevention and control and allocation of adequate resources to accomplish this endeavour.

**WHO-AIMS Report on Mental Health System in Iraq**: The primary goal was to collect information regarding the mental health system. This information will enable Iraq to develop information-based mental health plans with clear baseline information and targets. It will also be useful to monitor progress in the implementation of reform policies, provision of community services and involvement of users, families and other stakeholders in mental health promotion, prevention, care and rehabilitation.

**Iraq Mental Health Survey (IMHS-Natiowide)**: The principle objective is to provide policy, decision makers and researchers with reliable, useful and relevant data for the development of evidence-based mental health policies in Iraq.

**Rapid Assessment for Avoidable Blindness (RAAB):** The primary objective is to establish a baseline on the causes of blindness and visual impairment in Iraq to fulfil an obligation towards the "Vision 2020 Initiative." This assessment was conducted in the districts of Sulaimaniya and Basra as a starting point. efforts are made in collaboration with the concerned directorates at central level and with DOHs at local level to combat causes of blindness mainly in Basra.

**Series of Mental Health Assessments:** Fifteen research projects were undertaken to examine the magnitude of mental health problems in specific population groups and the impact of the mental disorders in terms of quality of life of ill persons. These projects were a result of training on research methodology supported by this programme. It was concluded that there is a high need for mental care in Iraq.

In addition, there were smaller scales assessments and monitoring in the form of regular oversight monitoring and supervisory visits conducted by MOH, WHO and Academia supervisors on sites of trainings, surveys and activities. The oversight visits were provided to engineering projects by resident engineers; the monitoring of data entry by trained programmers at each Directorate of Public Health offices in collaboration with central program supervisors during screening and assessment projects. Local monitoring and supervision on the implemented activities is carried out by NCD focal points and supervision on PHC labs by local laboratory supervisors at DOH levels.

No final evaluation was conducted. UNAMI, in collaboration with WHO. Plans for evaluation were put in pace to be conducted early 2010.

b. Indicate key constraints including delays (if any) during programme/ project implementation.

Many constraints were encountered while completing this project due to the complex situation present in Iraq. These constraints are listed in detail below along with recommendations for future programmes.

General Constraints

- Unstable security situation across the country during a long period of time of project implementation;
- Restrictions such as obtaining visas for national staff affected the efficiency of conducting trainings in outside Iraq and general communication;
- Price inflation after the war;
- Remote management caused delays that impacted the implementation of the project;
- Procurements and shipment of project materials across the Iraq border caused delays in implementation;
- Weak banking system inside Iraq and the risks of handling large quantities of cash caused delays in the delivery of supplies and equipment along with payments to beneficiaries;
- Continuous negotiations and team building between various disciplines took longer than anticipated;
- Unstable security situation impeded field work necessary for conducting epidemiological surveys and oversight visits through the increased number of days needed for trainings, surveys and monitoring due to shorter working hours, threats to staff and delays in delivery of necessary supplies;
- Lack of high quality materials in the local marketplace and a limited number of skilled construction workers inhibited the smooth construction of psychiatric units;
- Data collection for IMHS occurred at different times for different regions due to the security situation;
- Researchers conducting IMHS were met with sudden curfews, road closures and a climate of suspicion while collecting data;
- Training of personnel has been inefficient in many occasions due to disappearance of trained personnel shortly after their training is complete due to security threats on Professionals;
- Overlaps between the work of the government, NGOs and WHO make it difficult to work effectively.

#### Health Sector Constraints

- Inconsistencies in MOH leadership;
- High turn over of senior and ministerial focal points at all levels causing the loss of institutional knowledge and delays in the implementation process;
- Interrupted and shortage of MoH funds to sustain operational expenses;
- Long and complicated decision making process at MoH often resulting in the cancellation of fellowships despite prior approval and impeding direct contact between WHO and MoH staff on daily technical issues and follow up as all communications must be made through the International Health Department;
- Administrative policies of MoH and DoHs often delayed the design, bidding process and contract preparation for the rehabilitation and construction of psychiatric units;
- Some degree of conflict between various departments within the MoH;
- Community outreach for mental health has been established but is not functioning well. So far, its only been done by NGOs;
- Government bureaucracy;

- Attacks against health professionals;
- Migration of skilled health professionals.

#### UN System Constraints

- Unstable security situation impeding the movement of national staff both locally and in between different localities;
- Lack of continuous UN international staff on the ground;
- Security implications affecting the staff ceiling on UN premises in Iraq, hence limiting the number of international staff and personnel deployed and impeding effective monitoring and implementation;
- Bureaucracy within the UN, several layers of approvals necessary to complete a project (country office, regional office and headquarters).

c. Report key lessons learned that would facilitate future programme design and implementation.

A summary of lessons learned through the design and implementation of this programme is provided below:

#### General

- Iraqis are highly motivated and geared towards improving their living conditions and the quality of services which strongly facilitates implementation;
- Long years of wars and sanctions have severely weakened the biomedical equipment maintenance system in Iraq;
- Knowledge of the local context and capacity to adjust to a new environment is a key factor to successful interventions;
- The clarification of roles assigned to responsible officers and the designation of the ultimate decision maker at the beginning of programme implementation process was an essential step to limit confusion regarding management structure;
- Effective payment mechanisms need to be created to overcome delays during programme implementation;
- Conflict situations increase the mental health needs of the population. Of the different population groups, children, women, and those experiencing high trauma and losses are the most vulnerable. The needs of these groups require immediate attention in the planning of interventions;
- Human rights notions and peace-building approaches are important elements to integrate into programme strategies;
- The inclusion of Iraqi counterparts at every stage of programme planning and implementation is essential to ensure a sense of ownership;
- Ongoing training of health professionals and engineering staff is necessary to counter the migration of professional staff.

#### <u>Health</u>

- Investment in health care technology should be maintained and set as a priority in achieving quality health care services;
- The cost of response to NCD diseases and MH problems is much more than the cost of preventive interventions: the continuity of timely preventative interventions is the keystone of effective public health responses;
- It has been shown that it is possible to address the psycho-social and mental health needs of the population through innovative community based interventions;
- Mental health care is not limited to traditional psychiatric services from specialists, but extends to integration of mental health care with general health care and self-care by the general public;

- The creation of a NCD Task Force is a productive way of integrating the care of NCDs in to the PHC system;
- The creation of a National Council for Mental Health with wide representation of the stakeholders to carry out regular activities is a fruitful way of advancing the cause of mental health of the population. All concerned individuals, professionals and nonprofessionals, should be involved at all stages of decision making and implementation;
- Undertaking needs assessment using the WHO-AIMS is an important way of systematically understanding the existing situation and the planning of interventions;
- Human resources development is a priority in rebuilding NCD and mental health services;
- Integration of mental health care with primary health services is an important approach in providing appropriate care within a short period of time and in providing services in a destigmatizing manner. The planning of the mental health care Programs should be linked to the development of general health services;
- Programs aimed at fighting the stigma attached to mental illness and substance abuse is an important part of the mental health Program. Stigma can limit the utilization of the various mental health initiatives;
- Research should be an integral part of the mental health initiatives as research provides national data both for advocacy with planners and the choice of priorities and interventions.

#### UN System

- Despite high staff turnover, building residue capacity in Iraq is an essential element of support provided by the UN to Iraq;
- A strategy consisting of various WHO focal points to regularly conduct site visits in order to monitor trainings, surveys and activities is essential to effective programme implementation;
- Inter-sectoral collaboration, especially with the education and voluntary sectors, is vital for taking mental health beyond mental disorders and professional level services;
- International professional support has been effective for advocacy and technical support. The support of WHO and National psychiatric associations has been critical in the development of the mental health Program in Iraq, especially the very early meeting organized by WHO in July 2003, and the periodic review with the Ministry of Health, Iraq;
- Recognizing the complexity of the needs and limitations of the conflict situation, and the
  insecurity for travel, there is need for greater flexibility in procedures for activities such
  as fellowships, recruitment of staff, purchase of supplies etc. There is a need for
  sustaining the very active day-to-day coordination of activities at country-level, with the
  country's WHO office, the WHO Regional office and the WHO headquarters;
- Availability of funds for mental health care Program is vital to the success of the Program. The generous support of the Japanese Government has been especially valuable in making mental health initiatives a reality.
- Despite the fragile security situation during the course of the project, it was feasible to conduct field surveys and visits.

#### IV. INDICATOR BASED PERFORMANCE ASSESSMENT

	Performance Indicators	Indicator Baselines	Planned Indicator Targets	Achieved Indicator Targets	Reasons for Variance (if any)	Source of Verification	Comments (if any)
<b>IP Outcome 1:</b> Enhanced surveillance substance abuse to guide ongoing police			regular basis in	the areas of hypert		cancer, mental he	ealth and
IP Output 1.1	Indicator 1.1.1	0	1	1			
Standardized baseline data on	Chronic NCD Risk						
common NCD risk factors	Factors Survey is						
established; a surveillance system for	implemented.						
cardiovascular diseases, cancer and	Indicator 1.1.2	0	90,000 items	90,000 items			
diabetes established; supplies and	Procurement of						
equipment for the management of	medical equipment,						
diabetes provided; and integration of	supplies, informatics						
hypertension and diabetes	equipment, and						
management into primary health care	accessories for						
established.	NCDs.						
	Indicator 1.1.3	0	45	41			
	Hypertension and						
	diabetes screening						
	implemented in						
	PHCs.						
	Indicator 1.1.4	0	5,500	5,184			
	Health personnel						
	trained in the						
	prevention and						
	control of NCDs.						
IP Output 1.2	Indicator 1.2.1	0	1	1			
The national cancer registry system	Plan for national						
strengthened.	cancer registry						

	system drafted.					
<b>IP Output 1.3</b> Situation analysis of mental health needs assessed; the functioning of existing mental health facilities strengthened; training to improve the quality of mental health care within primary health care implemented;	Indicator 1.3.1 Iraq Mental Health Survey is implemented to provide data regarding mental health needs.	0	1	1		
services for the prevention and management of common disorders provided; mental health services in schools established.	<b>Indicator 1.3.2</b> Rehabilitation of existing psychiatric facilities.	0	7	7		
	<b>Indicator 1.3.3</b> Construction of new psychiatric facilities.	0	6	6		
	<b>Indicator 1.3.4</b> Health personnel trained in the prevention and control of mental health disorders and substance abuse.	0	1,250	1,040		
	<b>Indicator 1.3.4</b> Schoolteachers were provided manuals on psychological first aid for children.	0	1	1		
<b>IP Output 1.4</b> Situation analysis about substance abuse assessed and flow of data established.	<b>Indicator 1.4.1</b> Iraq Mental Health Survey is implemented to provide data regarding mental	0	1	1		

		1		1	1			
	health needs.							
<b>IP Outcome 2</b> : Enhanced health activ	ities to promote the prev	rention of NO	CDs and mental h	ealth disorders in	the community;			
<b>IP Output 2.1</b> A multi-sectoral committee and plan for the promotion of healthy lifestyles and primary prevention of NCDs established.	Indicator 2.1.1 National committee from various government agencies was formed to publish national guidelines for chronic NCDs.	0	1	1				
<b>IP Output 2.2</b> Community awareness about risk factors and early detection of cardiovascular diseases and cancer upgraded.	Indicator 2.2.1	0	2	0				
<b>IP Output 2.3</b> Health services for rheumatic fever and rheumatic heart disease introduced and implemented with referral system.	Indicator 2.3.1	10	19	13				
<b>IP Outcome 3:</b> Services for preventio	<b>IP Outcome 3:</b> Services for prevention and control of blindness initiated;							
<b>IP Output 3.2</b> Services for control and prevention of blindness strengthened with a focus on primary eye care.	Indicator 3.2.1 Community vision centers equipped with diagnostic equipment and supplies procured by WHO.	0	22	22				

Indicator 3.2.2	2 districts	2	2	Reports
Implementation of				received from
Rapid Assessment of				MoH in
Avoidable Blindness				addition to
(RAAB) survey.				supervisory
				visits.

#### Annex Number 1: WHO-IRAQ Mental Health Programme: Research Project Abstracts

#### Mental health symptoms following wars and repression in Mosul city

Dr. Mohammad S. Alkaisy

The aim was to study the impact of 27 years of war on the prevalence of symptoms of Post Traumatic Stress Disorder (PTSD), depression and anxiety and its relation to exposure to traumatic events. 424 adult from 159 households were surveyed. Iraqi version of Harvard Trauma Questionnaire, Hopkins Symptoms Checklist, and Coping mechanism were used. 98% of respondents reported at least 4 trauma events. 26% experienced between 5-10 trauma events and 18% experienced more than 10 trauma events. The prevalence of respondents with symptoms of depression was (43%), symptoms of anxiety (60%) and symptoms of PTSD was (26%). Symptoms were more prevalent in women than in men. Rates were higher with higher numbers of traumatic events. Religion and family were the main resources for emotional support.

#### Post-traumatic stress disorder in secondary school adolescents

Dr. Issam K. Taha

The study describes the prevalence of PTSD among traumatized adolescents in secondary schools in the capital Baghdad along with the role of different risk factors and utilization of services. The sample included in the study is grade 4, 5, and 6 students from 8 secondary schools in the capital Baghdad. 1090 secondary school adolescents were included. Harvard Trauma Questionnaire (HTQ)–Iraqi Version was the tool. 68% had experienced more than 3 trauma events. 30 % of the total sample (32.1% females and 26.4% males), were suffering from PTSD symptoms. 92 % of the students with PTSD symptoms had not received any treatment

#### Psycho-morbidity among working children at Dohuk city

#### Dr Nezar Ismet Taib

The aim of the study was to identify psycho-morbidity among working and street children and the effect of working at a young age. Subjects consisted of 120 working children selected randomly compared with 120 non-working school children. Psychiatric assessment was carried out using MINI international interview for children and adolescent (MINIKID). The prevalence of psychiatric disorders is 2-3 times higher among working children than schoolchildren. A significant relation was found between working aspects of children and psychiatric morbidity. The high morbidity in working children calls for interventions at a number of levels.

#### Prevalence of depressive syndromes among pregnant Iraqi women

#### Dr. Safa'a Jawad Zwain

Depression during pregnancy is a significant health concern for women and their developing babies. This is a prevalence study of depressive syndromes in pregnant women. 70 pregnant women were screened using ICD-10 checklist. 50% of the sample had depression and there are strong association between depression and unemployment (P<0.005). Depression was more common during the second and third trimester of pregnancy (p<0.005). Depression is a major psychiatric complication in pregnancy. There is a need for training of the primary health care personnel in antenatal clinics to screen, refer and provide care to depressed pregnant women.

#### Prevalence of Post Traumatic Stress Disorder among psychiatric outpatients

Dr. Khalil Ibrahim Ishmael Al Karkhi.

The study describes the prevalence of post traumatic stress disorder (PTSD) among psychiatric outpatient in Al-Fayhaa hospital in Basra. Two hundred patients consecutively referred to the psychiatric outpatient in Al Fayhaa hospital in Basra were assessed for PTSD using the Iraqi version of Harvard Trauma Questionnaire (IVHTQ). The prevalence of PTSD was 36.5%. Most of the avoidant symptoms of PTSD have the highest rate. Rates were higher among singles, females, and those with lower level of education. Most of the avoidant symptoms of PTSD have the highest rate and the most of re- experienced symptoms have the lowest rate.

#### **Prevalence of psychiatric morbidity among patients attending a dermatological clinic** Dr Rathwan Al- Tuhafy

The aim was to study t the prevalence and pattern of psychiatric morbidity in dermatological outpatient attendees. Three hundred dermatological patients attending the dermatology outpatient clinic in Al-Zahrawi teaching hospital in Mosul-Iraq. The Arabic version of general health questionnaire version-28 (GHQ-28) was applied as a screening tool in this study. Those scoring 6 and above were considered possible cases on the GHQ-28, were interviewed using the ICD-10 checklist. One hundred twenty three of them (41%) were confirmed as actual psychiatric cases. Younger age group, females, those with long duration of illness had higher prevalence rates.

#### Knowledge of primary health care physicians about psychiatric medications

Dr. Waiel Hikmet Salman

Integration of mental health with primary health care is an important approach to delivery of basic mental health care in developing countries. The purpose of the study was to find out how much PHC physicians know about psychotropic medications, their indications, doses, side effects and toxicity and its relation to duration of their practice and past training. 106 physicians formed the sample. The scores of psychiatric knowledge among the majority of the sample were either very poor or poor. Number of female physicians with very poor and poor knowledge was higher than male physicians. Those less than 40 years old and those with more recent year of graduation were more knowledgeable.

# **Comparison of quality of life of schizophrenic patients and control population in Baghdad** Dr.M.Ghasam

The study of quality of life (QOL) and the focus on patients' subjective sense of well-being is a new approach to understand the impact of the illness. 87 patients suffering from schizophrenia attending the psychiatric outpatient unit of Al-Rashad teaching hospital in Baghdad and 1000 control formed the subjects. QOL of the patients and the control sample were assessed using the WHOQOL-100 Arabic version. Patients group scored lower than control on all facets of QOL For the control group, the highest scores on facet of self-esteem, while the lowest scores on facet of security. For the patients, the highest scores on facets of; religion and dependence on treatment or medications.

#### Quality of life of with schizophrenia from rural and urban areas

Drs. Ali Ibrahim Hamdan, and Ibraheem Ali Najim.

This is a study of the quality of life of outpatients diagnosed with schizophrenia from urban and rural areas and comparison group of general population. World Health Organization Quality of Life-100 Questionnaire (WHOQoL-100 questionnaire) was used. 126 schizophrenic outpatients from urban and rural areas compared with that of 100 persons from the general population. Patients from urban and rural groups have significantly lower quality of life as compared with the control group.

#### Prevalence of psychiatric morbidity among plastic surgery patients with mutilated ears

#### Dr. Ali R. Zaroor

Prospective study of all consecutive attendees at Al-Wassety Hospital for plastic Surgery to reconstruct their mutilated ears for the prevalence of mental disorders. 260 persons with ear mutilation patients were screened using the GHQ –28. Based on the cut off point of 6, all the probable positive cases were evaluated by using 1CD-10 check list. Prevalence rate of psychiatric morbidity among is 81%. The prevalence rate of psychiatric morbidity in partial ear mutilated patients is 80.5% which in total ear mutilation patients is 84.9%. PTSD (45%), depression (36.2%) and somatoform disorders (17.7%) were the common diagnosis. There is significantly higher incidence of psychiatric morbidity among single patients, unemployed, illiterate.

#### Prevalence rate and correlates of depression in diabetic patients in Baghdad

Dr. Ali Abbas Zebala

The study presents the results of prevalence of mental disorders among people with Diabetes and the socio-demographic variables associated with depression, diabetes and their co-morbidity. 100 persons with diabetes mellitus and 100 controls formed the sample. The instrument used for screening was the international diagnostic checklist for ICD-10 (ICDL) for depression. The prevalence of diagnosable depression was 36% in the diabetic group as compared to 16% in the control group. The depression rates were twice that in females as compared to males. Unemployment, low income, young age was also associated with higher rates. Depression was of greater severity in the diabetic group.

#### **Prevalence of Post Traumatic Stress Disorder in primary school children in Baghdad 2006** Dr.Ali H.Razoki

The present situation in Iraq is dominated by violence, looting, kidnapping, torture, or murder creating an extremely threatening and traumatizing atmosphere for the whole population and especially for children.: A cross-sectional multi stages sample survey of 600 respondent aged 6-15 years from sixteen schools were screened for post-traumatic stress disorder (PTSD) using the Arabic version of MINI (international Neuro-psychiatric interview PTSD module. In the preceding 2 years, 47% of the respondents had experienced major traumatic events. The prevalence of PTSD among school children was 14%. The male: female ratio was 1:3.

#### **Prevalence of attention-deficit hyperactivity disorder among junior school children** Dr.Hussein Alail Wda'a Al Sayyad

Attention deficit hyperactivity disorder (ADHD) is gaining recognition as an important public health problem in young children. 50 primary junior school children were studied using the child symptoms inventory (CSI-4). The prevalence of ADHD was 14%. Male to female ratio was 4:3. Majority of the ADHD subjects were of low academic achievement.

## Resttlement prospects for inpatients at Al-Rashad Mental Hospital/Baghdad

Dr.Naama Shlaba Humaidi

Rehabilitation of the patients who have been in the mental hospital for a long period of time is a challenge. The current study describes the rehabilitation needs of patients at the Al-Rashad mental hospital as evaluated by the treating psychiatrist. 723 patients diagnosed as suffering from schizophrenic illness formed the sample. 65.5% of the sample were ready for life outside the hospital.72% of the subjects had no contact with the family, in spite of nearly half of the subjects were from Baghdad. There is urgent need for de-stigmatizing psychiatric care as well as to develop community support systems for families with mentally patients living with them.

### Prevalence of anxiety and depressive disorders in primary health care

Dr.Ahmad Hassan

Anxiety and depressive disorders are common among those seeking primary health care. 214 primary care attendees were screened using the patient health questionnaire (PHQ). The quality of life was assessed using the WHO-QOL instrument. Prevalence of depressive disorder was 10.2% and that of anxiety disorders 8.4%. The rates were higher in women and the less literate patients. The quality of life of patients was lower than those who had no psychiatric disorder. There is need for training of the primary health care physicians on essentials of mental health care.

Annex Number 2: List of Procured Medicines under NCD and Mental Health Programme								
EndUserName	Description	Qty	Total Price(USD)	Supplier No				
NCD & Mental Health	Carbamazepine 200 mg tablet packing size:pack of 1000 Labs catalog no: 272001	6000	53,992.76	I.D.A , INTERNATIONAL DISPENSARY ASSOCIATION				
NCD & Mental Health	Chloropromazine Hydrochloride 100mg c-tablet packing size: pack of 1000 tabs	180	1,135.59	I.D.A , INTERNATIONAL DISPENSARY ASSOCIATION				
NCD & Mental Health	Carbamazepine 200 mg tablet packing size:pack of 1000 Labs catalog no: 272001	6000	53,992.76	I.D.A , INTERNATIONAL DISPENSARY ASSOCIATION				
NCD & Mental Health	Chloropromazine Hydrochloride 100mg c-tablet packing size:pack of 1000 tabs	180	1,135.59	I.D.A , INTERNATIONAL DISPENSARY ASSOCIATION				
NCD & Mental Health	Soduim Valproate 200 mg tablet. Catalog no.: DD007P	1300	7,150.00	DURBIN PLC				

Annex Number 3: Lis	t of Procured Technology under NCD	and Ment	al Health Progra	amme
EndUserName	Description	Qty	Total Price(USD)	Supplier No
Ministry of Health	Scanner (HP 5590) Scan up to 8-P-or 4Images	1	310.00	TIME TECNOLOGY FOR COMPUTER
MOH /HIV UNIT	LPO for It equipment for Injury Surveillance (part B) Item 2: Laptop /Fujitsu Simens Esprimo V5545 Processor :Intel Chipset Memory:2GB DDR2 533MHZ Hard DisK: 250 GB SATA Removble Drives :Removable combo DVD \CD-RW Display :15.4 TFT WZGA Video :NVDI	1	1,100.00	AL-Fiker Co.Ltd
MOH /HIV UNIT	Item 3a :Multifunction Color All in One Printer (HP Offcejet color 4180 or Equiv	5	335.00	AL-Fiker Co.Ltd
MOH /HIV UNIT	Item 3b: Toner for HP Laserjet	3	300.00	AL-Fiker Co.Ltd
MOH /HIV UNIT	Item 3c:Toner for Canon 2900 laser printer	3	315.00	AL-Fiker Co.Ltd
NCD & Mental Health	Dell Power edge 2800 server tower, dual intel Xeon 3.2Ghz (2 processor) 800Mhz FSB, 1MB L2 cache, intel E7520 chipset, 2GB standard DDR-2 400 SDRAM memory, embedded dual channel ultra 320 SCSI, PERC 4 embedded RAID DOCS,8x1" + 2 1" Ultra 320 hot plug SCSI	1	7,174.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L

NCD & Mental Health	HP Laserjet 2420 laser printer 32 MB RAM, 1200 x 1200 dpi complete to specifications with all manuals in English. 1 yr warranty	20	11,520.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	HP Laserjet 2420 DN laser printer 64 MB RAM, 1200 x 1200 dpi, with duplex unit and HP jet direct fast Ethernet complete with all manuals in English. 1 yr warranty	6	5,538.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	HP Scanjet 5590 colour flat bed scanner with 50 sheet automatic document feeder complete with all manuals in English. 1 yr warranty	4	1,732.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	APC Smart UPS 750 VA USB and serial 230V	20	4,180.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	Sharp Ar-M450 multifunctional photocopier - 45 ppm with large LCD touch screen with animated guide, automatic document feeder, Handles paper upto 11" x 17" full duplex with simultaneous duplex scanner, 3100 sheet paper capacity , paper bank , 1250 sheet f	4	21,560.00	SHARP MIDDLE EAST FZE
NCD & Mental Health	Dell optiplex GX 280 SD intel P IV 2.8Ghz/800 Mhz 1 MB 512 MB DDR II SD RAM, 80GB EIDE SMART Ultra ATA hard drive , integrated AC 97 audio, integrated intel graphics broadcom gigabit 1 network connection with support for Remote Wakeup and alert standard	20	17,500.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	Dell Latitude D 600 intel Pentium M processor 725 1.6Ghz with 1 MB cache, 512 MB DDR SD RAM, 855PM chipset, 14.1" XGA TFT LCD monitor 1024x768, ATI mobility Radeon 9000 video with 32MB SD RAM, 80GB EIDE/ATA 1 hard disk, DVD/CD-RW combo drive, 56K v.92	10	14,990.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L
NCD & Mental Health	HP Colour Laserjet printer 4650 HDN with 256 MB RAM, 20 GB hard drive, with duplex unit, network card complete with manuals in English. 1 yr warranty	1	3,569.00	ZAK SOLUTIONS FOR COMPUTER SYSTEMS CO. W.L.L

Annex Number 4: List of Procured Medical Supplies under NCD and Mental Health Programme

EndUserName	Description	Qty	Total Price(USD)	Supplier No
NCD & Mental Health	Slit Lamp 2x magnification with Applanation Tonometer (Includes Motorized-Table and all accessories). Manufacturer:Top Can,Jopan	2	13,239.88	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Halogen bulb,packl of 2 pcs. Manufacturer :Top Con Japan	4	373.83	DEEPAK ENTERPRISES
NCD & Mental Health	Direct Ophthalmoscope:Beta 200 3.5 V,Lithium Rechargeable handle &Charger system,in case. Manufacturer:Heine, Germany	4	1,993.77	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Bulb:3.5 V, pack of 2 for above ophthalmoscope Manufacturer:Heine,Germany	4	156.39	DEEPAK ENTERPRISES
NCD & Mental Health	Spare lithium battery,rechargeable Manufacturer:Heine, Germany	4	492.21	DEEPAK ENTERPRISES
NCD & Mental Health	Provision of Estimated freight & insurance charges.	1	2,255.72	DEEPAK ENTERPRISES
NCD & Mental Health	Direct Ophthalmoscope:Beta 200 3.5 V,Lithium Rrchargeable handle&Charger system in case Manufacturer:Heine Germany	22	10,383.48	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Bulb :3.5 v,pack of 2 for above ophthalmoscope Manufacturer:Heine Germany	11	407.23	DEEPAK ENTERPRISES
NCD & Mental Health	Spare lithium battery rechargeable Manufacturer:Heine Germany	22	2,563.42	DEEPAK ENTERPRISES
NCD & Mental Health	Snellen and E combined Visual Acuity Chart Manufacturer:Heine Germany	22	162.24	DEEPAK ENTERPRISES
NCD & Mental Health	Slit Lamp 2xmagnification with Applanation Tonometer (Includes Motorized -Table and all accessories). Manufacturer:Heine Germany	22	137,905.60	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Halogen bulb pack of 2 pcs Manufacturer:Top Con,Japan	11	973.45	DEEPAK ENTERPRISES
NCD & Mental Health	Steak retinoscope:Beta 200 3.5 V,Lithium Rechargeable handle& Charger system in case Manufacturer:Heine Germany	22	11,778.76	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Bulb:3.5 V,Pack of 2 for above Retinoscope. Manufacturer:Heine Germany	11	470.50	DEEPAK ENTERPRISES
NCD & Mental Health	Spare Lithium battery,rechargeable	22	2,563.42	DEEPAK ENTERPRISES
NCD & Mental Health	Internal reading lensmeter Top Con, Japan	22	26,283.19	DEEPAK ENTERPRISES
NCD & Mental Health	Autorefractometer code:AR-310A maufacturer: nidek, japan	22	163,613.75	Al-Amin Medical Instrument CO (AMICO) S.A.E

NCD & Mental Health	Trial set code:61- Bmanufacturer:msD Italy	22	20,378.85	Al-Amin Medical Instrument CO (AMICO) S.A.E
NCD & Mental Health	universal Trial frame code.TF301 manufacurer : Tomy:gapan`	22	3,826.54	Al-Amin Medical Instrument CO (AMICO) S.A.E
MOH-Iraq Baghdad NCD Program	NCD Report Design Charges: size: A4 No. of pages :120 pages+cover Colors: 4 colors, 2 sides	1	1,977.40	B-Design & Markiting
NCD & Mental Health	ECG 12 channel with colour touch screen display .including set of electrodes patient cable get and paper roll 112mm/25m,model BTL 08 MT 1- integrated graphic disply- 5.7"touchscreen" 2-Built-in rechargeable Battery 3-paper speed:5-25-50mm/sec-3/	28	65,727.20	Munir sukhtian Group co LTD
NCD & Mental Health	<ol> <li>1-Integrated Graphic display (large display -5.7 touch screen)</li> <li>2-Built-in rechargeable Battery</li> <li>3- Paper speed:5-25-50mm/sec- 3/6/12 channel selection.</li> <li>4-Alpha-numerical Keyboard,</li> <li>5-Electrode control</li> <li>6-Automatic or manual printout function.</li> <li>7-Heart ra</li> </ol>	1	0.00	Munir sukhtian Group co LTD
NCD & Mental Health	Trolley(OrignalTrolley)	28	16,601.20	Munir sukhtian Group co LTD
NCD & Mental Health	Chest electrodes for adults(chest Agcl electrodes for adult,1pcs)	504	6,708.24	Munir sukhtian Group co LTD
NCD & Mental Health	Extremity electrodes for adults (Extremity AGCI electrodes for adult 4 pcs)`	84	3,252.48	Munir sukhtian Group co LTD
NCD & Mental Health	Bottle of get for electrodes (Botte 260mm)	28	105.00	Munir sukhtian Group co LTD
NCD & Mental Health	Recording paper roll of 36m (Roll of 25m)	280	1,187.20	Munir sukhtian Group co LTD
NCD & Mental Health	Extra patient cable	28	4,743.20	Munir sukhtian Group co LTD
Primary Healthcare Services	Khan tubes, pack of 1000pcs, code 1075 (Aptaca/Italy)	406	2,537.50	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC
Primary Healthcare Services	Automatic pipettor size 10uL, fixed volume, color coded code 9470202 (Hirschmann/Germany)	135	6,615.00	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC
Primary Healthcare Services	Pipette tips for valume 10 ul, pack of 1,000 pcs,cod e 1202 (Aptaca/Italy)	406	1,624.00	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC
Primary Healthcare Services	Automatic pipettor siz 1,000ul ul, fixed volume ,color code 9470210 (hirschmann/ Germany)	135	6,615.00	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC

Primary Healthcare Services	Pipette tips for volume 1,000 pcs code 1001(Aptaca/Itally)	135	675.00	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC
Primary Healthcare Services	Shipping Charges	1	1,500.00	Sahoury / ALFAIHA FOR LABORATORY & SCIENTIFIC
NCD & Mental Health	HP Scanner for NCD & MH/MOH HP Scanner 5590	1	430.00	Mazin AI saad center for computer services
Eye Care Services	Plastic Headband x2.5simple and n any position for easy flip -up viewing optivisor DA-5 Donegan optivisor DA-5 Donegan optical USA	160	22,400.00	JJ Bureau Ltd
Eye Care Services	Snellen illiterate E combined Visuity chart clement clarke Intl uk	160	5,600.00	JJ Bureau Ltd
Early Detection of High Blood Pressure and diabetes	Printing Guidelines booklets on Diabetes & Hypertension: Guidelines booklets Hypertension :size 21x30 paper type: white 80 gm one color printing , cover art 200 gm 4 colors printing 30 papers for each one	5000	4,000.00	AL-sate e CO
Early Detection of High Blood Pressure and diabetes	Guidelines booklets Diabetes: size 21 x 30 cm paper type: white 80 gm one color printing Cover: art 200 gm 4 colors printing 30 papers for each one	5000	4,000.00	AL-sate e CO
MOH-Iraq Baghdad NCD Program	ECG, 12-channel, model CardiovitAT-102, Fully automatic microprocessor controlled, mains and battery operated, built-in LCD (120x90mm) Memory software for approx 40 ECG 12 simultaneous standard leads Battery lasts for up to 300 recording standard Acce	22	42,680.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Trolley CT6001(Malaysia)	22	7,480.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Set of Electrodes: Suction electrodes pack of 6Extremity electrode.pack of 41 electrode gel (ml) 2.000041	66	3,960.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Tubes of electrode gel	110	440.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Recording Paper Package AT-102 thermosensitive,Z-Folded 1 package 210mm wide/ 40m long 2.157025	220	2,640.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Extra 10 lead patient cable IEC Zm W/banna plugs 2.400070	22	2,948.00	Tech Counsult Jordan
MOH-Iraq Baghdad NCD Program	Transportation and insurance charges to Baghdad	1	7,000.00	Tech Counsult Jordan

NCD & Mental Health	Marshland Boats: Body Boat: * All Aluminum (hull and substructure according to marine grade Aluminum 5083 - H 321 with thickness of 04mm). * Flat bottom. * Out board short pillar. * L.O.A (Length): 6.4Meter. * Beam (Width): 2 meter. * Loaded Draft 0.3Mete	2	92,910.00	Wahat AL-Badya General Trading Co.
Primary Healthcare Services	Laboratory Equipment for Strengthening PHC services ITB IRQ/13/2007 Spectrophotometer,UV /visible range 200-1000nm.Model to cecil CE 1021 Microprocessor-controlled,single beam operation with automatic reference corrected measurements Holographic grati	14	53,774.00	Wagtech international Ltd.
Primary Healthcare Services	Tungsten Halogen lamp ,pack of 2	14	927.22	Wagtech international Ltd.
Primary Healthcare Services	'Deuterium lamp, 1500 hour	14	7,120.40	Wagtech international Ltd.
Primary Healthcare Services	Calibration filters,Set 4 certified absorbance calibration filters in holders	14	16,836.82	Wagtech international Ltd.
Primary Healthcare Services	Set of 2 certified wavelength calibration filters in holders	14	10,532.34	Wagtech international Ltd.
Primary Healthcare Services	Glass cell and lid, 10mm	14	704.62	Wagtech international Ltd.
Primary Healthcare Services	Silica cell and lid, 10mm	14	1,186.78	Wagtech international Ltd.
Primary Healthcare Services	Accessories and spares:	1	0.00	Wagtech international Ltd.
Primary Healthcare Services	2020 27 00 - Fuse kit-2 sets per pack	14	778.82	Wagtech international Ltd.
Primary Healthcare Services	1011 00 01 - Spare instruction manual and Series 1000	14	964.18	Wagtech international Ltd.
Primary Healthcare Services	0100 00 18 - Service manual for Series 1000	4	900.64	Wagtech international Ltd.
Primary Healthcare Services	2020 0123 - Dust cover	14	1,186.78	Wagtech international Ltd.
Primary Healthcare Services	Delivery to Amman Airport	1	4,774.09	Wagtech international Ltd.
NCD & Mental Health	Zeiss laboratory microscope Axiostar Plus with double binocular tube Each set consists of: #1169149 Stand (545), one : #380079 9690 000 Halogen bulb 6V 20W, 7 at 12; #1220 224 Contrast blue filter, one, at 7; # 1013 262 Double tube ICS with po	4	13,850.98	ZEISS CARL
NCD & Mental Health	Long-life halogen bulb 6V 20W commodity code:L20 600 00 Less 20.00%discount	4	62.75	ZEISS CARL

NCD & Mental Health	Zeiss laboratory microscope Axiostar Plus with binocular photo tube, equipped with quadruple revolving nosepiece and the objectives 5x, 10x and 40x, for , one , 545; #38079 9690 000 Long-Life halogen bulb 6V20W , 2 each , at 12; # 467850 9901 0	2	4,227.45	ZEISS CARL
NCD & Mental Health	Adapter 60 for microscope camera, d=30mm commodity code: L20 600 00LEss 20.22% discount	2	167.32	ZEISS CARL
NCD & Mental Health	Universal digital camera adapter d30 M37/52x0.75 catalogg no: 426126 0000 000 Less 20,00%discound	2	650.98	ZEISS CARL
NCD & Mental Health	Compact Digital Camera Canon PowerShot A95 for M52(D) incl. Zeiss filter adapter and power supply Catalog no: 426134 9902 000 commodity code:L20 008 00 Less 20.00% discount	2	1,294.12	ZEISS CARL
NCD & Mental Health	Video Camera Hitachi KP-D20B 1/2" 1-CCD C-Mount (D) 1 Chip 1/2" CCD Colour Camera with C- Mount. Compact Profile, PAL, Y/C ,Comp catalog no: 0455522 commodity code: L20 009 00 Less 20.00%discount	2	3,233.99	ZEISS CARL
NCD & Mental Health	14" Colour - Videomonitor Hitachi CPX-1402MS (D) for 1-CCD colour Cameras	2	1,254.90	ZEISS CARL
NCD & Mental Health	Adapter Video 60 C 1/2" 0.5x catalog no:1069 415 commodity code:L20 009 00 less 20.00% discount	2	969.93	ZEISS CARL
NCD & Mental Health	Image Analysis MiniWorkstation multilingual (D) catalog no:0462 841 commodity code L19 Less 20.00%discount	2	1,759.48	ZEISS CARL
NCD & Mental Health	Memory 512 MB DDR-RAM 333 MHz Mini (D) Catalog no:0462845 commmodity cod:L19 Less 20.00% Discount	2	300.65	ZEISS CARL
NCD & Mental Health	Language package Windows XP English (D) consisting of: Windows XP operating system multilingual English Keyboard , mouse , documentation catalog no: 1221 885 commodity code L19 Less 20.00% Discount	2	551.63	ZEISS CARL
NCD & Mental Health	Long-Life halogen bulb 6V 20W Catalog no:380079 9690 000 commodity code L20 600 00 Less 20.00% discount	4	62.75	ZEISS CARL

NCD & Mental Health	Zeiss binocular laboratory microscope Axiostar plus ICS SE with quadruple revolving nosepiece and objectivex CP- Achromat 5x, 10x, 40x and 100x (oil immersion), for transmitted-light brightfield Catalog no:491031 9999 000 commodity code: L20 Less 20.00	25	39,705.88	ZEISS CARL
NCD & Mental Health	Long-life halogen bulb 6V20W catalog no: 3800799690 000 commodity code :L20 600 00 Less 20.00% discount	50	784.31	ZEISS CARL
NCD & Mental Health	Installation and on-site training for users, for all above equipment	1	2,614.38	ZEISS CARL
NCD & Mental Health	Ventilator for intensive care Taema Horus standard. Technical specifications of the ventilator: Driving gas : Air or O2, supply from 280 kPa (2.8 bar) to 600 kPa (6 bar). Ventilation Modes: (CMV- ACMV) (SIMV) (PCMV-APCMV) PEEP (PS- PEEP) (MRV) (APRV) (Non	30	815,758.75	MEDICAL EXPORT GROUP
NCD & Mental Health	Mobile trolley commodity code: H14 200.00	30	47,081.71	MEDICAL EXPORT GROUP
NCD & Mental Health	Heated humidifier Fisher and Paykel MR850	30	108,365.76	MEDICAL EXPORT GROUP
NCD & Mental Health	Air compressor Aridyne 3600 with DISS outlets , hoses and compressor filter kit Installation and after-sales included	30	172,762.65	MEDICAL EXPORT GROUP
NCD & Mental Health	Foley balloon catheter , 2-way , male , latex , sterile , CH12	40000	12,451.36	MEDICAL EXPORT GROUP
NCD & Mental Health	Foley balloon catheter , 2-way , male , latex , sterile , CH14	40000	12,451.36	MEDICAL EXPORT GROUP
NCD & Mental Health	Foley balloon catheter , 2-way , male , latex , sterile , CH18	20000	6,225.68	MEDICAL EXPORT GROUP
NCD & Mental Health	Ultrasound gel, normal viscosity . Packing size : can / 5L	1000	4,474.71	MEDICAL EXPORT GROUP
NCD & Mental Health	FCA delivery charges	1	972.76	MEDICAL EXPORT GROUP
NCD & Mental Health	Ophthalmic DIODE Laser ARC Classic G 532nm, frequancy doubled diode pumped Nd:YAG wavelength 532nm (Green) with remote control and footswitch fiber 50u, power end fiber > 2.0 Watt, complete with CSO slit lamp with magnification changer 3 positions, protect	5	151,167.32	MEDICAL EXPORT GROUP
NCD & Mental Health	Cost for installation by Iraqi technicians (lumpsum)	1	12,840.47	MEDICAL EXPORT GROUP
NCD & Mental Health	Warranty / after sales services for 1 year (lumpsum)	1	7,555.12	MEDICAL EXPORT GROUP

NCD & Mental Health	Ventilator for intensive care Taema Horus standard. Technical specifications of the ventilator: Driving gas : Air or O2, supply from 280 kPa (2.8 bar) to 600 kPa (6 bar). Ventilation Modes: (CMV- ACMV) (SIMV) (PCMV-APCMV) PEEP (PS- PEEP) (MRV) (APRV) (Non	30	815,758.75	MEDICAL EXPORT GROUP
NCD & Mental Health	Mobile trolley commodity code: H14 200.00	30	47,081.71	MEDICAL EXPORT GROUP
NCD & Mental Health	Heated humidifier Fisher and Paykel MR850	30	108,365.76	MEDICAL EXPORT GROUP
NCD & Mental Health	Air compressor Aridyne 3600 with DISS outlets , hoses and compressor filter kit Installation and after-sales included	30	172,762.65	MEDICAL EXPORT GROUP
NCD & Mental Health	Foley balloon catheter , 2-way , male , latex , sterile , CH12	40000	12,451.36	MEDICAL EXPORT GROUP
NCD & Mental Health	Foley balloon catheter , 2-way , male , latex , sterile , CH14	40000	12,451.36	MEDICAL EXPORT GROUP
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NCD & Mental Health	Ultrasound gel, normal viscosity . Packing size : can / 5L	1000	4,474.71	MEDICAL EXPORT GROUP
NCD & Mental Health	FCA delivery charges	1	972.76	MEDICAL EXPORT GROUP
NCD & Mental Health	Ophthalmic DIODE Laser ARC Classic G 532nm, frequancy doubled diode pumped Nd:YAG wavelength 532nm (Green) with remote control and footswitch fiber 50u, power end fiber > 2.0 Watt, complete with CSO slit lamp with magnification changer 3 positions, protect	5	151,167.32	MEDICAL EXPORT GROUP
NCD & Mental Health	Cost for installation by Iraqi technicians (lumpsum)	1	12,840.47	MEDICAL EXPORT GROUP
NCD & Mental Health	Warranty / after sales services for 1 year (lumpsum)	1	7,555.12	MEDICAL EXPORT GROUP
NCD & Mental Health	SCHILLER ARGUS LCM basic - Version A; with manual in English	40	152,576.27	SCHILLER AG
NCD & Mental Health	Second battery , incl. cable	40	2,000.00	SCHILLER AG
NCD & Mental Health	3-lead patient cable complete , clip type , IEC	40	6,406.78	SCHILLER AG
NCD & Mental Health	5-lead patient cable complete , clip type , IEC	40	8,677.97	SCHILLER AG
NCD & Mental Health	Blue sensor electrodes . Packing size : set of 25 pieces	40	359.32	SCHILLER AG
NCD & Mental Health	Adult finger sensor type LNOP DCI (reusable) patients weighting > 30kg / > 65 lbs	40	10,542.37	SCHILLER AG
NCD & Mental Health	Adult digit sensor type LNOP ADT (disposable) patients weighting > 30kg / > 65 lbs (bx/20pcs) Pediatric / Slender digit sensor type LNOP PDT (disposable) . Patient weighing 10-50kg / 22- 110lbs (box of 20 pieces)	40	28,542.37	SCHILLER AG

NCD & Mental Health	Temperature probe , reusable , YSI 401 , oesophageal or rectal application (adult)	40	3,966.10	SCHILLER AG
NCD & Mental Health	Cuff adult, 25-35 cm, 9.8-13.8", latex free	40	1,796.61	SCHILLER AG
NCD & Mental Health	Legalization fees and FCA delivery charges	1	338.98	SCHILLER AG
NCD & Mental Health	Stomach tubes , sterile, disposable Suction catheter tube G8, with X Ray opaque line. Material : transparent polyvinyl chloride (PVC), length : 50cm , O.D. of tube: G/3. Distal end : open. Proximal end : funnel , open / thumb control. Packing size : box o	400	3,600.00	PRAXIMED
NCD & Mental Health	Stomach tubes , sterile, disposable Suction catheter tube G10, with X Ray opaque line. Material : transparent polyvinyl chloride (PVC), length : 50cm , O.D. of tube: G/3. Distal end : open. Proximal end : funnel , open / thumb control. Packing size : box	500	4,725.00	PRAXIMED
NCD & Mental Health	Stomach tubes , sterile, disposable Suction catheter tube G14, with X Ray opaque line. Material : transparent polyvinyl chloride (PVC), length : 50cm , O.D. of tube: G/3. Distal end : open. Proximal end : funnel , open / thumb control. Packing size : box	600	6,186.00	PRAXIMED
NCD & Mental Health	Feeding tubes G12 with X Ray opaque line in paper poly packing (one side medical grade paper and one side HMHDPE film) Material : transparent polyvinyl chloride (PVC), length : 50 cm, O.D. of tube : 4 mm . Distal end : sealed with two cross eyes. Proxim	1000	7,760.00	PRAXIMED
NCD & Mental Health	Direct Ophthalmoscope Riester with XL 3.5V xenon lamp or HL 2.5V halogen lamp Handheld, Robust construction, illumination: 3.5V halogen lamps, Battery operated, Includes batteries, rechargeable types, Corrective lenses -35 to +40 diopters, Six different a	100	29,919.42	FLEISCHHACKER
NCD & Mental Health	Halogen lamp for above	100	2,342.14	FLEISCHHACKER
NCD & Mental Health	Replacement battery handle, rechargeable for the above Direct Ophthalmoscope	100	7,154.56	FLEISCHHACKER
NCD & Mental Health	Binocular Indirect Ophthalmoscope with diffuser and yellow filter with the following features: Adjustable light intensity, Adjustable height, tilt	20	8,455.48	FLEISCHHACKER

	and distance of optical system, Adjustable Headband height, Battery/rechargeable, supplying the built-in hal			
NCD & Mental Health	Voltage adapter for the above Indirect Ophthalmoscope	20	832.50	FLEISCHHACKER
NCD & Mental Health	Carrying case for the above Indirect Ophthalmoscope	20	468.43	FLEISCHHACKER
NCD & Mental Health	Replacement halogen lamp for the above Indirect Ophthalmoscope	20	312.02	FLEISCHHACKER
Control and Prevention & Blindness Program	Ophthalmoscope Heine K-180 in pouch (C-182-10-118)	25	4,625.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Keratometer : Bausch and Laumb type	10	6,200.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	A scan with printer includes 3mm diameter probe Solid Tip, SRK II, Holladay, Binkhorst II formulas, automatic and manual gain control modes, internal graphics printer	10	37,500.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	B scan with high resolution video printer Display : 15 inch Color CRT Log. Linear or S-curve amplification Scan angle 40 Degr. , 60 Degr selectable B-Scan rate 13 or 18 MHz	1	16,500.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Vision 2020 Low vision group, consisting of : 2 x Diamond wheel edging machines ( 5 inch wheel) , ref. DEB 904. 1 x Complete automatic edging machine unit ref. DEB 999. 1 x Lensmeter (External reading typ e) ref. DED 705. 1 x Frame heaters (hot air flo	1	20,215.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Ophthalmoscope indirect Heine Omega 180 with EN15 (C-212- 40-300)	25	29,875.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	ECCE/PCIOL Cataract set, complete	20	5,424.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Evisceration Entropion Set	10	2,851.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Operation table , motorized , foot switch operated , adjustable head rest	10	10,500.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Bipolar coagulator : Wet field cautery with 2 cords and 2 forceps	20	5,900.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Head worn loupe including large frame , cord , cloth and case : 6x	5	3,725.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Distance Vision Testing Drum, motorized with remote, vertical panel with four different charts (direct)	20	4,400.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Retinoscope Heine Beta 200 Streak in pouch (C-34-10-118)	20	4,700.00	DEEPAK ENTERPRISES

Control and Prevention & Blindness Program	Schiotz tonometer	25	1,625.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Diaspheric lens, 20D	20	2,200.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Gonioscope lens, three mirror	20	4,500.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	Non-illuminated leather case , powers up to +-20.00 D. Sph & +- 6.00 D. Cyl. Prisms & other standard accessories, in powder coated aluminium Rims	30	6,000.00	DEEPAK ENTERPRISES
Control and Prevention & Blindness Program	L-0169 INAMI Slit lamp microscope 911SX with halogen lamp, boster switch and XYZ joystick, with manual in English	25	98,519.42	INAMI & CO LTD
Control and Prevention & Blindness Program	K-1411 Instrument stand without table top	25	7,315.53	INAMI & CO LTD
Control and Prevention & Blindness Program	L-5110 INAMI Applanation tonometer with swing arm and two cone prisms	25	21,893.20	INAMI & CO LTD
Control and Prevention & Blindness Program	FCA delivery charges	1	728.16	INAMI & CO LTD
Control and Prevention & Blindness Program	Basic Equipment 2, VISULAS 532s (w/o table with power cord) Diode pumped frequency-doubled solid state laser, wavelength 532nm, suitable for retinal photocoagulation, using a therapy slit lamp and motorized micromanipulator. Coaxial coupling of the lase	1	33,408.51	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Laser slit lamp LSL 532s	1	14,417.91	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Blinking diode , red, for fixation light	1	17.86	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Power cord 2.5m for Europe	1	10.60	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Instrument table IT 4L (230V, 50/60Hz)	1	1,947.71	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Safety eyeglasses Argon / 532	1	150.33	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Table mount for VISULAS 532s on IT 4L	1	342.48	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Contact lens: Goldmann three mirror for Argon/532	1	439.22	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Waveguide 2.0m	1	398.33	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Parallel tube f= 140mm	1	1,712.69	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	10x eyepiece, high eyepoint	2	841.28	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Headband for VISULAS Laser	1	15.62	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Arm rest (variable height)	1	40.17	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Dust cover	1	25.66	CARL ZEISS MEDITEC AG

Control and Prevention & Blindness Program	Fixation light	1	258.86	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Occulting sleeve for fixation light	1	9.37	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Basic equipment VISULAS YAG III (without table with power cord) . Ophthamic laser for photodisuption. Supergaussian mode for reproductible andgentle treatment. Focusshift posterior, anterior and zero. Laser system with 4-point aiming beam patter. Possibil	1	20,580.68	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Laser slit lamp LSL YAG III	1	13,051.76	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Power cord 2.5m for Europe	1	10.42	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Instrument table IT 3L (230V, 50/60Hz)	1	1,882.35	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Safety eyeglasses YAG	1	226.14	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Contact lens : Abraham capsulotomy for YAG	1	794.77	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Parallel tube f= 140mm	1	1,683.01	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	10x eyepiece , high eyepoint	2	826.69	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Headband for VISULAS Laser	1	15.35	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Arm rest (variable height)	1	39.48	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Dust cover	1	25.22	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Fixation light	1	254.37	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Occulting sleeve for fixation light	1	9.22	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Blinking diode, red, for fixation light	1	17.54	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	FDT . The FDT Visual Field instrument, with patented Welch Allyn Frequency Doubling Technology, provides an efficient , easy to use, clinically verified, accurate and affordable testing modality for the detection of visual field loss	2	16,781.70	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Instrument table AK 103a , 230V	2	1,466.67	CARL ZEISS MEDITEC AG
Control and Prevention & Blindness Program	Non-mydriatic Retinal Camera TRC-NW200 w/built-in digital camera, data transfer and image viewing software with accessories and manual in English . Feature : Easy-to-use non-mydriati ic retinal camera integrating mega-pixel high quality digital camera. Ex	2	33,009.71	TOPCON CORPORATION

Control and Prevention & Blindness Program	Adjustable instrument table AIT- 15	2	776.70	TOPCON CORPORATION
Control and Prevention & Blindness Program	Table top for AIT-15 t	2	116.50	TOPCON CORPORATION
Control and Prevention & Blindness Program	Portable surgical light. Clamps to srip stand operates from mains or a 12V battery . Fitted with two 50 Watt lamp and supplied with 1 spare lamp. Supplied in a sturdy fitted carry case 34x22x11cm. Weighs only 7kg when packed, 20 watt lamps are available a	10	7,280.00	SCAN OPTICS
Control and Prevention & Blindness Program	Cross cylinder . 50D	20	1,226.42	MISSIONPHARMA A/S
Control and Prevention & Blindness Program	Steriliser 12x6x4 inches	20	7,207.55	MISSIONPHARMA A/S
Control and Prevention & Blindness Program	Dixey trial frame	30	4,202.83	MISSIONPHARMA A/S
Control and Prevention & Blindness Program	Cataract Surgery Kit for 5 surgeries. ECCE procedure (as per list enclosed) with : Intra Ocular Lens (PMMA): 60% 21 Diopter power. 20% 20 Diopter power. 20% 22 Diopter power	600	42,600.00	AUROLAB
Control and Prevention & Blindness Program	Zeiss operation microscope OPMI 1-FR with apochromatic 5-step magnification changer, motorized fine focus, retinal protection device, daylight filter KK40, eye protection filter GG475 on rollable floor stand 1.25m for ophthalmology, consisting of : 1 x OP	10	117,647.06	ZEISS CARL
Control and Prevention & Blindness Program	Halogen lamp 12V, 100W	50	1,372.55	ZEISS CARL
Control and Prevention & Blindness Program	Consumable: Asepsis set 12mm for OPMI VISU 150/200 comprising 2 sterilizable rubber caps 302602-0203	10	65.36	ZEISS CARL
Control and Prevention & Blindness Program	Consumable: Asepsis set 22mm for OPMI VISU 150/200 comprising 6 sterilizable rubber caps 305810-0001	10	392.16	ZEISS CARL
Control and Prevention & Blindness Program	Consumable: Sterilizable rubber cap for star-shaped control knobs with 49mm diameter	20	261.44	ZEISS CARL