

**Republic of Iraq  
Ministry of Health  
Iraqi Cancer Board**

**Iraqi  
National Cancer Control Program  
Five Year Plan  
2010 – 2014**

**February 2010**

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## **Iraqi National Cancer Control Program /2010 – 2014**

### **2. Cancer Registry Unit in Provinces :**

- a. Activation & development of all cancer registry units in all provinces by provision of staff , computer & software to ensure optimum work
- b. Encouraging provincial cancer registry units to publish provincial cancer registry taking as pilot examples :
  - (1) Mosul ( Nineveh ) : Documented Cancer registry 1976 – 2008
  - (2) Basrah : Documented Cancer registries 2005 – 2008
  - (3) Babil ( Hilla ) : Documented Cancer registry 1990 – 2000
  - (4) Najaf : Cancer registry 2000

### **3. ICB Affiliates in the Provinces :**

#### **1. Provincial Cancer Control Committees :**

Renomination of provincial cancer committees in Baghdad and all the provinces, as it was the case before 2000 , in order to represent ICB and supervise NCCP implementation .

Committee members include :

- DG Health
- Representative of Provincial Council
- Representative of College of Medicine
- Director of Technical Affairs at DOH
- Director of Public Health at DOH
- Director of Cancer Control Center / unit
- Director of Oncology Hospital ( if present )
- Cancer Control Experts ( 2-3 )
- Oncology Nurse
- Cancer Patient

#### **2. Cancer Control Centers ( CCC ) :**

At present there are 4 Cancer Control Centers in Baghdad , Mosul , Basrah & Babil ( Annex - 4 : Structure and Staffing of CCC ) . The following parameter are to be used in establishing Cancer Control Centers in the provinces .

- a. 2010 - 2012 : CCC is to be established in all provinces with a population of 1.5 million or more ( Thiqr , Erbil , Sulaimania ) .
- b. 2013 – 2014 : CCC is to be established in all provinces with a population of one million or more ( Kirkuk , Sulaimania, Anbar , Kerbalaa , Wasit , Najaf , Diwaniya , Misan ) .

#### **3. Cancer Control Units ( CCU ) :**

Activation and follow up of Cancer Control Units is all other provinces

#### **4. Cancer Registry Units:**

Development of Cancer Registry Units in all provinces DOHs by ensuring proper staffing and provision of necessary computers , hardware & software needed to achieve proper work .



#### **4. Financing :**

1. Increasing ICB and provincial CCC revenues through :
  - a. Iraqi Federal Budget ( sections related to MOH & ICB )
  - b. Social support
  - c. WHO and other international organizations allocations ( special topics)
  - d. Endorsement of the following recommendation : " collecting special tax on each pack of 20 cigarettes ( 100 I.D ) or 1 kg of tobacco ( 2000 I.D ) " . This may collect up to 100 billion I.D annually .
2. Allocation of special budget for provincial CCC from the above mentioned revenues

#### **3. Evaluation & Audit :**

1. Use of Iraqi NCCP Surveillance Sheet ( Annex – 3) to study the status cancer control in Iraq in 2008 and the upcoming years in order to plan for future developments
2. Annual Surveillance and evaluation during 2009 through 2014 to monitor implementation of NCCP and preparation of annual reports at the following levels :
  - a. country level
  - b. provinces level
  - c. specific sections of NCCP viz ; registry , prevention , early detection etc.
3. Use of implementation , impact and results parameters in evaluating all sections of the program :
  - a. Implementation
    - (1) provision specific services
    - (2) service reach to patients , individuals and communities all over the country
  - b. The impact of service or intervention on their target ( community , patient , patient's family and medical & health care providers )
    - (1) improved awareness of better life style & prevention
    - (2) improved knowledge about early detection signs & techniques
    - (3) improved treatment services
    - (4) improved palliative care services
    - (5) improved work environment for all health care workers
  - c. Results :
    - (1) increased percent of cancer cases discovered at early stage as compared to over all cancer
    - (2) improved response & cure rate
    - (3) decreased Cancer mortality
    - (4) decreased number of new cases
4. Reorganization of Distinction Regulations in implementation of NCCP ( persons , institutes , organizations , NGO , etc. )
  - a. ICB Shield : annual honour bestowed during Iraqi Cancer Control Day ( 24 February )
  - b. Iraqi National Smoking Control Day Awards ( Present since 1987 )
  - c. Letters of thanks and appreciation , bonuses , gifts , etc.
  - d. Special Awards and Certificates of Distinction : to be decided later .



## Part II : NCCP Main Pillars

### Cancer Control Pillars :

1. Prevention
2. Early Detection
3. Treatment
4. Palliative Care and Pain Relief

### Prevention :

#### 1. Principles :

- a. Emphasis on all prevention criteria as a basic and important part of cancer control
- b. Using primary health care services , family medicine . NCD program and collaboration with all directorates of MOH especially Directorate of Public Health
- c. collaboration with other Ministries ( Education , Higher Education & Research , Environment , Athletics & Youth, etc.) , NGOs , international organizations , scientific societies etc.
- d. Close collaboration with the media of all types ( printed , audiovisiual , electronic ) to ensure delivery of prevention concepts to all public
- e. Preparation , development and endorsement of appropriate legislation ( law , sub laws and regulations ) related to carcinogens and lifestyle factors including diet , smoking , environment and occupational safety

#### 2. Factors :

##### a. Smoking Control :

- (1) Support & development of Iraqi Smoking Control Committee established in 1986
- (2) Implementation of FCTC endorsed by WHO on May 21 , 2003 and ratified by Iraqi Parliament ( Law No 17 Year 2007 )
- (3) Legislation :
  - Endorsement of the " Draft Smoking Control Law " prepared the Iraqi Smoking Control committee in 1989 to strengthen the present regulations , orders and MOH memos on smoking control .
  - Endorsement of legislation to impose extra tax on cigarette and tobacco . This will help decreasing consumption by increased prices and to collect additional money to finance control and treatment of smoking related diseases .
- (4) support of smoking control committees at provincial level

##### b. Food & Diet :

- (1) Healthy food education
- (2) Control and laboratory testing of all foods especially canned & imported foods to ensure that it is carcinogens free
- (3) Encouragement of research on the role of food in prevention of cancer
- (4) Development of already present legislation on food control

**c. Physical Activity :**

- (1) Education about the role of physical activities as a healthy lifestyle and cancer prevention measure .
- (2) comparative research in this field .
- (3) Activation and strengthening of physical fitness and athletic programs in schools , institutes and university curricula .

**d. Environment :**

- (1) collaboration with Ministry of Environment and the relevant NGOs to make Iraqi Environment safe for all citizen
- (2) emphases on implementation of Environment Protection Law ( No. 27 Year 2009 ) and all the regulation issued thereafter .

**e. Viral infections :**

- (1) Strengthening viral hepatitis vaccination and detection program
- (2) Strengthening AIDS prevention & early detection program

**f. Bilharziasis Control :**

Strengthening bilharziasis early detection and eradication program specially in southern provinces



## **Early Detection :**

The most common cancers in Iraq that has a potential for early detection are , breast , bladder , colon & rectum and skin

### **1. Principles :**

- a. Setting National Educational Campaign about early warning signs of cancer
  - (1) all media types ( printed , audio visual and electronics )
  - (2) intermediate and secondary school curricula ( present but may need revision )
- b. Strengthening early detection programs with proven efficacy viz ; breast cancer , cervical cancer , colorectal cancer

### **2. Breast Cancer Early Detection :**

- a. Support of the National Breast Cancer Early Detection Committee started in 1996 and well established in 2000
- b. Use of the following parameter in establishing Breast Centers & Clinics in all provinces
  - (1) Breast Center for every 2 million population
  - (2) Breast Clinic for every 1 million population
- c. Revision of the structure and staffing of Breast Clinics & Centers to improve the medical, nursing & educational services provided ( Annexes – 5,6 )
- d. Provision of medical equipments and computers
  - (1) Digital Mammography
  - (2) Doppler U/S with breast probe
  - (3) Computers , digital camera

### **3. Sexually Transmitted Diseases ( STD ) Clinic :**

Cancer of cervix is uncommon in Iraq . Total number of new cases in 2005 was 176 only . However STD clinics can be used gradually to set up plans for cervical smears .

### **4. Other initiative:**

Encouragement of research and studies for early detection of other cancers ; bladder , colorectal , skin , lung , oral , etc .



## Diagnosis :

Distribution of diagnostic services ( imaging , cytological , histopathological & hematological ) to all provinces or at least group of neighboring provinces

## Treatment :

Cancer treatment services are not enough in Baghdad and incapacitated in all provinces because of lack of medical & nursing staff and lack of chemotherapy and radiotherapy . It is highly needed to established cancer treatment centers and units in all provinces in addition to recruiting and training staff needed .

### 1. Principles :

- a. Recognition of cancer treatment hospitals in Baghdad , Mosul , Basra , Babil , and other provinces . In addition , setting staffing and structure standards and provision of chemotherapy and radiotherapy .
- b. Establishing Oncology and Hematology Units ( or sections) in few Baghdad Hospitals and one in a central hospital in each province .
- c. Separation of radiation oncology specialty and medical oncology specialty to ensure better & more specialized care for patients .
- d. Establishing job description of radiation oncologists , medical oncologists , pediatric hematoncologists and other staff .
- e. Publication of Iraqi EBM Guidelines on various cancers management with update every 2-3 years . International reference guidelines can be used especially those published by ESMO, ASCO, NCCN , etc. . Implementation of these guidelines all over the country will improve patient care. Management protocols outside the scope of these guidelines are only allowed in the context of officially approved research protocols and patient consent .
- g. Encouraging establishment of oncology groups to take care of the most common cancers . Each group should have multi specialty members viz ; medical oncologist , radiation oncologist , surgical oncologists , psychologist , histopathologist , oncology nurse , clinical pharmacist , etc .
- h. Twinning and partnership with internationally recognized comprehensive cancer centers to ensure development of the national treatment facilities and improvement of patient care ( use of telemedicine )

### 2. Structure

#### a. Cancer Treatment Services Structure:

It should depend on population and distance from nearest cancer treatment facility. The number needed for every million patient or 500 new case is shown in table 3

#### b. Treatment Facilities :

- National Comprehensive Cancer Center : Baghdad
- Cancer Center : provinces
- Adult Medical Oncology Unit
- Pediatric Hematoncology Unit



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**Table 3: Cancer Treatment Services Need  
Per Million Population or 500 New Cancer Cases**

Cancer Treatment Service	No. of Units	No. of Specialist
Radiotherapy Treatment Equipment (Linear Accelerator or New Cobalt Machine with Accessories)	1	2 Radiation Oncology Specialists
Adult Medical Oncology Unit (10) beds	1	2 Medical Oncologists
Adult Hemato-oncology Unit (10) beds	1	2 Hemato-oncologists
Pediatric Hemato-oncology Unit (10) beds	1	2 Pediatric Hemato-oncologists

### Adult Oncology Unit ( provinces ) :

Affiliation : Dept. of Medicine, Central Teaching or General Hospital  
 Duties : Management of adult patient ( 15 yrs and above ) having malignant tumors or blood diseases  
 Beds : 10 beds  
 Staffing : Medical oncologists 2 , SHO 2 , HO 1 , nurse 5 , attendants 4  
 Registration : Special case sheet ( medical record and cancer registration form )

### Adult Hematoncology Unit ( provinces ) :

Affiliation : Dept. of Medicine, Central Teaching or General Hospital  
 Duties : Management of adult patient ( 15 yrs and above ) having malignant tumors or blood diseases  
 Beds : 10 beds  
 Staffing : Medical hematologists 2 , SHO 2 , HO 1 , nurse 5 , attendants 4  
 Registration : Special case sheet ( medical record and cancer registration form )

### Pediatric Hematoncology Unit :

Affiliation : Pediatric Dept. Central or Teaching General or Pediatric Hospital  
 Duties : Management of children( < 15 yrs) having malignant tumors or blood diseases  
 Beds : 10 beds  
 Staffing : Pediatric hematologists 2 , SHO 2 , Ho 1 , Oncology nurse 3-11 , attendants 2  
 Registration : Special medical records( case sheet ) and cancer registration form

### 3. Distribution of Services :

a. Iraqi National Comprehensive Cancer Center : Baghdad

b. Oncology Centers : provinces

special building with 40 beds , 2 radiotherapy units , 2 medical oncologists , 2 radiation oncologists, etc.



**Table 4 : Cancer Centers Need in Iraqi Provinces  
( 2010 – 2014 )**

	Province	No.	Cancer Centers
			Place
1	Baghdad	2	- Medical City - Other Facility ( as needed)
2	Nineveh / Mosul	1	Mosul Oncology & Nuclear Medicine Hospital ( 1 Radiotherapy Unit present)
3	Basrah	1	Basrah Oncology & Nuclear Medicine Hospital
4	Babil / Al-Helaa	1	Merjan Hospital
5	Al-Najaf	1	To be decided by DOH
6	Theqar / Al-Naserea	1	To be decided by DOH
7	Erbil	1	Nana Kree Hospital ( 1 Radiotherapy Unit present )
8	Al-Sulemania	1	To be decided by DOH ( 1 Radiotherapy Unit present)

c. Adult Medical Oncology Units :

to be established one in every province at the central teaching or general hospital with (10) beds and 2 physician trained in medical oncology

d. Pediatric Oncology Unit :

to be established one in every province at the central general or pediatric hospital with (10) beds and 1-2 Pediatric hematoncologists

**4. Cancer Treatments staff :**

There is a deficiency in all medical , nursing and technical staff trained in cancer management in general . To ensure better staffing it is required to :

- Provision of scholarship for postgraduate studies in all oncology specialties ; radiation oncology , medical oncology , pediatric oncology , nursing oncology , radiation physics , etc.
- Requesting both Iraqi and Arab Board for Medical Specialties to establish postgraduate studies in oncology
- Training ( 3-6 months course ) of internal medicine specialists and pediatricians in medical oncology and pediatric oncology in well established centre abroad
- Training of nursing staff in nursing oncology inside & outside Iraq . ( Annex – 7 Developing Oncology Nursing in Iraq : Work Plan - 1996 )
- Training technical staff ( engineers , radiation physicists, radiotherapists , etc.) in country centers and abroad
- Studying the feasibility of the recommendation to impose ( full time work in cancer treatment facilities ) on all medical and other staff and preventing them from private work with provision of appropriate administrative and financial incentives
- Provision of special incentives for oncology specialists and care givers to attract those working abroad and preventing brain – drain of those working in Iraq at present .



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### 5. Chemotherapy :

Chemotherapy availability was scarce and interrupted over the past few years

- Preparation of " Essential Chemotherapy Drug List " and country – wide guidelines for treatment of most common cancers. WHO essential anticancer drug list is to be considered as a guidance .
- Estimation of annual chemotherapy need is to be based on practical parameters ( number of patients and type of cancer in each center ) to ensure continuous supply of these drugs to cancer units and centers . This will result in safe and effective management of patients

### 6. Radiotherapy :

WHO estimated that the need for radiotherapy units is one unit per 500 cancer patients or 0.5 million population . This means that Iraq needs 60 radiotherapy units to full fill the need of cancer patients

It is important to set up an urgent plan to supply new radiotherapy units taking in consideration the supply of modern linear accelerators and / or new computerized cobalt <sup>60</sup> units . It is well known that cobalt <sup>60</sup> units does not need high voltage power, need less complicated maintenance techniques and can be operated in two to three shifts .

#### a. Urgent Need for Radiotherapy Units ( 2010 – 2011 )

**Table 5 : Urgent Need for Radiotherapy Units ( 2010 – 2011 )**

Province	No. of Radiotherapy Units	
	Present	Needed
Baghdad – Radiotherapy & Nuclear Medicine Hospital	3 linacs	2
Baghdad – Medical City Teaching Hospital	none	2
Nineveh / Mosul	1 linac	2
Basrah	none	2
Babil / Al-Helaa	none	2
Al-Najaf	none	2
Theqar / Al-Naserea	none	1
Erbil	1 linac	1
Al-Sulemania	1 linac	1

#### b. Need for Radiotherapy Units ( 2012 – 2014 )

All other provinces should be supplied with one radiotherapy unit at least

## **Palliative Care and Pain Relief :**

### **1. Palliative Care and Pain Relief Clinic :**

- a. Re-establishment and activation of palliative care and pain relief clinics in all provinces.  
The first Cancer Pain Relief Clinic was established in Mosul 1985 . MOH has already asked all DOHs to establish these clinic in 1988 and 1998 . ( Annex – 8 Palliative Care and Pain Relief Clinic : Structure , Staffing and Work Plan)
- b. Ensuring enough supply of opioids both weak and strong and in oral & transdermal formulation
- c. Training of medical & nursing staff on palliative care and pain relief
- d. Exploring the idea of considering Palliative Care and Pain Relief as separate specialty in Iraq
- e. Starting the initiative of Home Care for advanced cancer patients as recommended by the action plan presented to MOH in 2002 ( Annex – 9 Home Care for Advanced Cancer Patients : Work Plan )

### **2. Ostomy Care :**

- a. Re-establishment and activation of Ostomy Units in all provinces to ensure provision of proper medical & nursing care for ostomates . Ostomy Care started in Mosul in 1992 and was endorsed by MOH in 1994 . ( Annex – 10 Ostomy Care & Units : Work Plan )
- b. Ensuring sufficient supply of ostomy care appliances and medication (Annex-11 Estimated Need for Ostomy Supplies )



### Abbreviation

CCC	Cancer Control Center
DOH	Directorate General of Health ; Provinces Level
FCTC	Framework Convention for Tobacco Control
HBV	Heptatis B Virus
HO	House Officer ( Rotator )
HPV	Human Papilloma Virus
ICB	Iraqi Cancer Board
MOH	Ministry of Health
NCCP	National Cancer Control Program
NCD	Non Communicable Diseases
NGO	Non Governmental Organization
SHO	Senior House Officer ( Senior Resident )
STD	Sexually – Transmitted Diseases
UICC	International Union Against Cancer



## Part III : Supporting Pillars

### Supporting Pillars :

1. Teaching & Training
2. Public Education
3. Research
4. Legislation
5. Volunteer Work and NGO
6. Cooperation & Partnership
7. Arabian , Regional and international Cooperation

### Teaching & Training :

1. Action plan for undergraduate and postgraduate studies in radiotherapy and management of adult & pediatric cancers :
  - a. MSs and Board degrees in radiation oncology , medical oncology and pediatric oncology
  - b. Training courses for specialists in internal medicine and pediatrics to rehabilitate them to work in medical & pediatric oncology
  - c. BSc studies in radiotherapy , radiation physics , simulation . etc.
2. Postgraduate scholarships abroad ( doctorate level ) in radiation oncology , medical oncology pediatric oncology and nursing oncology .
3. Requesting Iraqi & Arab Board for Medical Specialties to study the recommendation of establishing postgraduate studies in radiotherapy & oncology
4. Training courses for nurses in oncology nursing both inside Iraq & abroad . In 1996 an Action Plan on Developing Oncology Nursing was recommended ( Annex – 7 ) .
5. Training of technical staff ( engineer, radiotherapist , physicist , simulation , molds technicians , etc. ) nationally and abroad
6. Activation of CME & CPD program for medical, nursing and other health workers
  - a. Courses , symposia , workshops in Baghdad & provinces
  - b. Visits of international and regional experts
  - c. Attendance at regional and international conferences , courses & training visits
7. Organization of national symposia and workshops to discuss the implementation of various parts of NCCP
8. Organization of oncology conference :
  - a. 15<sup>th</sup> Iraqi National Cancer Conference
  - b. Oncology Conferences in Mosul , Basrah , etc .
  - c. Specialty Oncology Conferences



**Public Education :**

1. Nomination of media representative as a member of Iraqi Cancer Board
2. Embedding cancer education activities in all the programs implemented by all MOH Directorates all over the country with special emphasis on primary health care , school health care , family medicine and NCD programs
3. Celebration of the following Awareness Days :
  - a. Iraqi Cancer Control Day ( 24 February )
  - b. Iraqi Smoking Control Day ( 28 October )
  - c. World Smoking Control Day ( 31 May )
  - d. World Ostomy Day ( 2 October , every three years – 2 October 2011 )
4. Development of teaching curricula to ensure strengthening the concept of healthy lifestyle and prevention and early detection of cancer :
  - a. Primary , intermediate & secondary schools ( curricula already contain smoking control and breast cancer early detection Issues )
  - b. Health & Medical Institutes and Colleges
5. Setting a plan to change the myths and wrong and unrealistic concepts surrounding cancer and its causes , prevention and treatment to ensure better understanding and realistic look at cancer as a chronic disease
6. Collaboration with all media , specialty organization and NGOs (Media Role in Cancer Control : Work Plan - 1993)
7. Encouraging cancer patients & survivors and their families to participate in public education about cancer and sharing their experience with others

**Research & Studies :**

1. Encouraging technical and administrative studies about implementation of NCCP
2. Studying selection of pilot projects ( pain clinic , breast center , smoking control in a local area , etc .) in order to improve them and using them as future models for improving services.
3. National work plan for cancer research at postgraduate and specialty levels as part of MOH Health Research Plan ( every 3 – 5 yrs. )



## **Legislation**

### **1. Cancer Registry:**

Organization , development and republication of all regulations, orders & memos related to cancer notification and registry to ensure strict compliance of all public & private hospitals, centers and laboratories .

### **2. Smoking & Tobacco Control :**

- a. Endorsement of Smoking Control Law by Iraqi Parliament (Draft prepared in 1989)
- b. Imposing additional tax on cigarettes and smoking product (100 I.D per pack of 20 cigarettes and 2000 I.D per 1 kg of tobacco) to be used for control and management of smoking-related diseases

### **3. Food & Diet :**

Development and re-endorsement and publication of the regulation related to food control with special reference to carcinogenic food additives.

### **4. Environment :**

Strengthening the implementation of Environment Protection Law ( No. 27 Year 2009 ) and the regulations issued according to this law to ensure environmental safety and prevention of pollutants and carcinogens from reaching air , water and food chain

### **5. Occupational Health :**

- a. Reviewing the MOH Chemical Carcinogens Regulation ( No. 2 Year 1981 ) concerned with handling carcinogens to include newly identified carcinogens .
- b. Strengthening implementation of occupational safety and endorsement of a newly reviewed legislation

## **Volunteer Work and NGOs:**

Volunteer work by both members of the community (personal) and NGOs (group) is considered as basic and crucial part in the success of NCCP

1. Encouraging both healthy individuals and patients to voluntarily participate in one or more aspects of NCCP with special emphasis on prevention , early detection and palliative care .
2. Encouraging establishing NGOs interested in cancer control at large or in any one of NCCP aspects ( breast cancer , early detection , lung cancer, etc.)
3. Active ICB collaboration and partnership with individuals and NGOs interested in cancer control and in providing social and humanitarian services



**Iraqi Collaboration & Partnership :**

Strengthening continuing collaboration & partnership with the following parties to help implement and develop NCCP :

1. Iraqi Parliament and Provincial Councils
2. Ministries of Education , Higher Education & Research , Athletics & Youth , Women , Environment , Defense and Interior
3. Specialty organization , both medical & scientific
4. Medical nursing and health association ( syndicates )
5. NGOs working in field of cancer and humanitarian services
6. Cancer patients and survivors and their families

**Arabian , Regional and International Cooperation:**

1. Arabian , regional and international societies and organizations
2. WHO and its Baghdad Bureau
3. Implementation of international treaties and declarations :
  - a. Frame Work Convention for Tobacco Control FCTC – WHO : endorsed by Iraqi Law ( No.17 Year 2007 )
  - b. World Cancer Declaration – ( UICC WDC ) : Adopted as general targets for Iraqi NCCP 2010 – 2014 .
4. Membership of international organizations :
  - a. UICC (International Union Against Cancer )
  - b. INCTR ( International Network for Cancer Treatment and Research )
  - c. IARC (International Agency for Research on Cancer )
  - d. IOA (International Ostomy Association )
5. Nomination of one or more members of ICB to act as a liaison officer with Arabic , regional and international organization according to his or her interest , experience and specialty .



## **Annexes**

**Annex – 1    NCCP Status in Iraqi Provinces**

**Annex – 2    UICC World Cancer Declaration**

**Annex – 3    NCCP Surveillance Sheet ( Arabic )**

**Annex – 4    Cancer Control Center : Structure and Staffing ( Arabic )**

**Annex – 5    Breast Center : Structure and Staffing ( Arabic )**

**Annex – 6    Breast Clinic : Structure and Staffing ( Arabic )**

**Annex – 7    Developing Oncology Nursing in Iraq : 1996 : Work Plan ( Arabic )**

**Annex – 8    Palliative Care and Pain Relief Clinics : Structure Staffing and Work Plan ( Arabic )**

**Annex – 9    Home Care for Advanced Cancer Patients : 2002 : Work Plan ( Arabic )**

**Annex – 10   Ostomy Care and Units : Work Plan ( Arabic )**

**Annex – 11   Parameters for Ostomy Supplies Need ( Arabic )**



## **Introduction**

Iraq has a Surface area of 433.000 km<sup>2</sup> and an estimated population of 31.9 millions . The number of new cancer cases registered in 2005 is 15172 .

Annex 1 shows NCCP status in all eighteen Iraqi Provinces .

The common cancers in both sexes are ; breast , lung , bladder , leukemia , CNS , lymphoma , colorectal , larynx and skin .

Table 1 shows population distribution and new cancer cases in Iraqi provinces.

**Table 1 : Population Distribution 2008 and  
New Cancer Cases in Iraqi provinces 2005 \*\***

Province	Population/Millions <sup>(1)</sup> 2008	New Cancer Cases <sup>(2)</sup> 2005
Baghdad	7.137	5009
Mosul/ Nineveh	3.026	1032
Basrah	2.557	754
Babil	1.714	1054
Kirkuk	1.196	679
Salah Aldin	1.246	292
Dyala	1.318	498
Al-Anbar	1.446	393
Kerbalaa	1.006	549
Wasit	1.135	299
Al-Najaf	1.215	744
Al-Diwaniya	1.115	578
Al-Muthana	0.712	191
Misan	1.020	243
Thiqar	1.832	441
Erbil	1.527	358
Duhok	0.985	302
Sulaimania	1.687	301
<b>Total</b>	<b>31.9</b>	<b>15172</b>

(1) Ministry of Planning – Central Bureau of Statistics and Information Technology ;  
Memorandum 53 Date 14.10.08

(2) Iraqi Cancer Board . Iraq Cancer Registry 2005



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Table 2 shows top ten cancers in both sexes and in adults and children .

**Table 2 : Top Ten Cancers in Both Sexes , Adults and Children  
Iraq 2005**

Rank	All Ages & Sexes	All ages		Children
		Male	Female	
1	Breast	Lung	Breast	Leukemia
2	Lung	Urinary Bladder	Brain & CNS	Brain
3	Bladder	Leukemia	Leukemia	Lymphomas
4	Brain	NH Lymphomas	Colorectal	Bone
5	Leukemia	Brain & CNS	NH Lymphomas	Hodgkin Lymphoma
6	Lymphomas	Larynx	Lung	Kidney
7	Colon & Rectum	Colon & Rectum	Ovary	Eye
8	Stomach	Prostate	Stomach	Soft Tissue
9	Larynx	Stomach	Urinary Bladder	Skin
10	Skin	Skin	Uterus	Suprarenal
Total	9995	5088	5216	948
Total all	15172	7505	7667	1094

### **Cancer Mortality :**

In 2007 cancer mortality constituted 5.6 % of all deaths ( 137658 ) registered in Iraq excluding Erbil ,Duhok and Sulaimania . Cancer is the third most common cause of death in Iraq after cardiovascular diseases and accidents .

In 2007 Mosul Cancer Registry recorded 977 new cancer cases and 692 cancer deaths .

In 2005 , the number of new cancer cases registered in Basrah was 754 and the number of cancer deaths was 649 .



## Targets

### General Targets :

The UICC World Cancer Declaration Targets by 2020 ( Annex - 2 ) were adopted as general targets for Iraqi NCCP :

- 1.Sustainable delivery systems will be in place to ensure that effective cancer control programs are available in all countries
- 2.The measurement of the global cancer burden and the impact of cancer control interventions will have improved significantly
- 3.Global tobacco consumption, obesity and alcohol intake levels will have fallen significantly
- 4.Populations in the areas affected by HPV and HBV will be covered by universal vaccination programs
- 5.Public attitudes towards cancer will improve and damaging myths and misconceptions about the disease will be dispelled
- 6.Many more cancers will be diagnosed when still localized through the provision of screening and early detection programs and high levels of public and professional awareness about important cancer warning signs
- 7.Access to accurate cancer diagnosis, appropriate cancer treatments, supportive care, rehabilitation services and palliative care will have improved for all patients worldwide
8. Effective pain control measures will be available universally to all cancer patients in pain
- 9.The number of training opportunities available for health professionals in different aspects of cancer control will have improved significantly
- 10.Emigration of health workers with specialist training in cancer control will have reduced dramatically
- 11.There will be major improvements in cancer survival rates in all countries

### Specific Targets :

Implementation and development of Iraqi NCCP minutes with special emphasis on central planning and decentralization of implementation and initiatives . The main targets for 2010- 2014 :

- 1.Organization of NCCP administrative bodies at both central and provincial levels in a way that achieves efficacy and competency :
  - a. Nomination of key persons to implement the main targets at the Iraqi Cancer Board (ICB) and provincial levels .
  - b. Unification of definitions and parameters related to ICB and NCCP
  - c. Description of various specialties in all oncology fields
  - d. Update of prevention , early detection , treatment and palliative care plans .
  - e. Close cooperation and continuing partnership with :
    - (1) ministries , governmental organizations , scientific societies and NGOs in Iraq
    - (2) Arabian , regional and international organizations



## **Iraqi National Cancer Control Program /2010 – 2014**

2. Provision of cancer prevention services to all sectors of Iraqi communities and all ages with special emphasis on students, youths and women using all educational , teaching and media resources .Development and expansion of the already present cancer prevention issues in school curricula and primary health care and family medicine programs .
3. Strengthening awareness of early detection of most common cancer (breast , skin , bladder , colorectal , etc.) on all levels including media , schools , primary health care centers , family medicine center and health institutes .
4. Provision of medical treatment services of cancers in adults and children to all provinces. Provision of radiotherapy services to at least 60 – 80 % of provinces taking in consideration the number of population and distance from the nearest radiotherapy center .
5. Provision of palliative care and pain relief services , ostomy care and tracheostomy care to all provinces and introduction of palliative care issues in primary health care and family medicine programs .
6. Setting annual targets ( over the years 2010 – 2014 ) for implementation of NCCP



## Plan Features

### Plan Features ( 2010 – 2014 ) :

1. Involvement of all Iraqi provinces ( gradually and population based ) in :
  - a. Services
  - b. Supplies ( drugs , appliances , equipments )
  - c. Training & teaching
2. Nomination of key persons to be responsible about the various section of NCCP in Baghdad and all the provinces taking in consideration the desire and the experience of each person .
3. Implementation through MOH :
  - a. Directorate General of Public Health and DOHs Departments of Public Health : prevention , early detection , health education , etc .
  - b. Specialized and general hospitals : treatment and palliative care .
4. Comprehensive description of all parts of the program and the personnel( service and job description )
5. Preparation of EBM Guidelines in all fields of cancer control and management .
6. Provision of equal training and postgraduate opportunities to individuals from all provinces .
7. Encouraging NGOs to actively participate in NCCP .

### Minimum Requirement in Every Province :

1. Directorate of Health ( DOH )
  - a. Provincial Cancer Control Committee
  - b. Cancer Registry Unit / Cancer Control Center
  - c. Cancer Prevention Program
  - d. Cancer Early Detection Program , Breast Clinic or Center STD Center ,etc.....
  - e. Cancer Treatment Unit ( Teaching or General Hospital )
    - Adult Medical Oncology Unit
    - Pediatric Oncology Unit
    - Radiotherapy Unit
  - f. Palliative Care and Pain Relief Clinic
  - g. Ostomy Clinic
2. Provincial Communities :
  - One or more NGO working in cancer control field



## **Plan Sections**

### **A. Administration**

1. Iraqi Cancer Board
2. Cancer registry
3. Cancer control in the provinces
4. Financing
5. Auditing and evaluation

### **B. Four Cancer Control Pillars**

1. Prevention
2. Early Detection
3. Diagnosis & treatment
4. Palliative Care

### **C. Supporting Pillars :**

1. Teaching & training
2. Public education
3. Research
4. Legislation
5. Volunteer work and NGOs
6. Cooperation and partnership
7. Arabian , Regional and international cooperation



## Part I : NCCP Administration

### Iraqi Cancer Board ( ICB )

( Established by Law 63 Year 1985 )

1. Reorganizing the ICB to ensure adequate representation of various specialties , sectors and provinces by addition of new members representing :
  - a. Iraqi Parliament
  - b. Ministry of Education
  - c. NGO working in Cancer Control field
  - d. Iraqi Media Network
  - e. Oncology Nurse
  - f. Two cancer patients
2. Development of the Executive Body of the ICB to ensure maximum efficacy
3. Re-nomination of the main ICB committees with a balanced representation from Baghdad and all provinces :
  - a. Cancer Registry Committee
  - b. Cancer Prevention Committee
  - c. Cancer Diagnosis and Treatment Committee
  - d. Palliative Care Committee
  - e. Oncology Nursing Committee
4. Activation of Research Unit at ICB
5. Annual Surveillance of NCCP status in all provinces using ( Iraqi NCCP Surveillance Sheet ) developed in 2008 . ( Annex – 3 )

### Cancer Registry :

#### 1. Cancer Registry Section , ICB :

- a. Development of this section to become as it was before 2000 ( Iraqi Cancer Registry Center )
  - (1). Provision of needed hardware and software
  - (2) Staff recruitment and training
  - (3) Publishing Iraqi Cancer Registry Books for the years 2005 and later including cancer mortality
- b. Development , unification and publication of all ministerial directives , orders and guidelines related to cancer registry to ensure strict compliance of all public and private clinics & hospitals , public and private laboratories to register & notify all cancer cases using the special ( Cancer Registration Sheet , Cancer Notification Sheet)
- c. Exploration of starting a pilot initiative of community – based cancer registry in certain areas in Baghdad or other province and using the results to develop Iraqi Cancer Registry from being hospital – based to become community – based .



## Iraqi NCCP Status / 2008

**Annex 1 / Table 6 : Iraqi NCCP Status - 2008 / Palliative Care and Pain Relief**  
( Data taken from official NCCP surveillance sheets filled by DOHs )

Province	Population Millions 2008	Cancer Cases 2005	Pain Clinic	Opioids Availability	Ostomy Unit
Baghdad - Rasafa - Karkh -Medical City	7.134	5009	P	Scare	N
			P	?	?
			N	?	N
Mosul/ Nineveh	3	1032	P	Scare	P
Basrah	2.6	754	N	?	N
Babil	1.7	1054	P	Moderate	N
Kirkuk	1.2	679	N	?	N
Salah Aldin	1.2	292	N	?	N
Dyala	1.3	498	N	?	N
Al-Anbar	1.4	393	N	?	N
Kerbalaa	1.0	549	N	?	N
Wasit	1.2	299	N	?	N
Al-Najaf	1.2	744	P	P	N
Al-Diwaniya	1.1	578	N	P	N
Al-Muthana	0.7	191	N	P	N
Misan	1.0	243	N	?	P
Thiqr	1.8	441	P	?	N
Erbil	1.5	358	×	×	×
Duhok	0.9	302	×	×	×
Sulaimania	1.7	301	×	×	×
Total	31.9	15172	-	-	-

Abbreviation : NCCP : National Cancer Control Program

DOH : Directorate of Health ( Province Level )

P : present    N : not present    ? : data not supplied

× : surveillance sheet not returned by DOH



## Iraqi NCCP Status / 2008

**Annex 1 / Table 2 : Iraqi NCCP Status - 2008 / Prevention**  
( Data taken from official NCCP surveillance sheets filled by DOHs )

Province	Population Millions 2008	Cancer Cases 2005	Smoking Control Committee	Bilharziasis Control Committee	Food Control Lab.	Radiation Control Unit	Viral Hepatitis Vaccination	Occupation Safety Unit
Baghdad- Rsafa - Karkh -Medical City	7.134	5009	P	P	P	P	P	P
			?	P	P	P	P	?
			N	N	N	N	P	P
Mosul/ Nineveh	3	1032	P	P	N	P	P	P
Basrah	2.6	754	P	P	P	P	P	P
Babil	1.7	1054	N	P	P	P	P	P
Kirkuk	1.2	679	P	N	P	P	?	N
Salah Aldin	1.2	292	P	P	N	N	P	P
Dyala	1.3	498	P	P	P	N	P	N
Al-Anbar	1.4	393	P	P	?	?	P	P
Kerbala	1.0	549	P	P	P	P	P	N
Wasit	1.2	299	P	P	P	N	P	N
Al-Najaf	1.2	744	P	P	P	P	P	?
Al-Diwaniya	1.1	578	P	P	P	P	P	N
Al-Muthana	0.7	191	P	P	P	N	P	N
Misan	1.0	243	N	P	P	N	P	?
Thiqr	1.8	441	P	P	P	?	P	N
Erbil	1.5	358	×	×	×	×	×	×
Duhok	0.9	302	×	×	×	×	×	×
Sulaimania	1.7	301	×	×	×	×	×	×
Total	31.9	15172	-	-	-	-	-	-

Abbreviation : NCCP : National Cancer Control Program

DOH : Directorate of Health ( Province Level )

P : present N : not present ? : data not supplied

× : surveillance sheet not returned by DOH



## Iraqi NCCP Status / 2008

**Annex 1 / Table 3 : Iraqi NCCP Status - 2008 / Early Detection**

( [ata taken from official NCCP surveillance sheets filled by DOHs )

Province	Population Millions 2008	Cancer Cases 2005	Breast Cancer Center/Clinic	STD Clinic	Cervical Cytology
Baghdad - Rasafa - Karkh - Medical City	7.134	5009	Clinics 4	P	P
			Clinic	P	P
			Center	P	P
Mosul/ Nineveh	3	1032	Center + Clinic	P	P
Basrah	2.6	754	Clinic	N	N
Babil	1.7	1054	Clinic	P	N
Kirkuk	1.2	679	Clinic	N	P
Salah Aldin	1.2	292	Clinic	P	N
Dyala	1.3	498	Clinic	N	N
Al-Anbar	1.4	393	Clinic	P	P
Kerbalaa	1.0	549	Clinic	P	P
Wasit	1.2	299	Clinic	N	N
Al-Najaf	1.2	744	Clinic	?	?
Al-Diwaniya	1.1	578	Clinic	N	N
Al-Muthana	0.7	191	Clinic	N	N
Misan	1.0	243	Clinic	N	N
Thiqr	1.8	441	Clinic	N	N
Erbil	1.5	358	×	×	×
Duhok	0.9	302	×	×	×
Sulaimania	1.7	301	×	×	×
Total	31.9	15172	-	-	-

Abbreviation : NCCP : National Cancer Control Program

DOH : Directorate of Health ( Province Level )

P : present N : not present ? : data not supplied

× : surveillance sheet not returned by DOH



## Iraqi NCCP Status / 2008

**Annex 1 / Table 4 : Iraqi NCCP Status - 2008 / Diagnosis**

(Data taken from official NCCP surveillance sheets filled by DOHs)

Province	Population Millions 2008	Cancer Cases 2005	Histo Pathology	Cytology	Hematology	U/S	X-Ray	CT Scan	MRI	Radio/ Iso top
Baghdad- Rasafa - Karkh -Medical City	7.134	5009	P	P	P	P	P	P	P	P
			?	?	?	?	?	?	?	?
			P	P	P	P	P	P	P	N
Mosul/ Nineveh	3	1032	P	P	P	P	P	P	P	P
Basrah	2.6	754	P	P	P	P	P	P	P	N
Babil	1.7	1054	P	P	P	P	P	P	P	N
Kirkuk	1.2	679	P	P	P	?	?	?	?	?
Salah Aldin	1.2	292	P	P	P	?	?	P	P	N
Dyala	1.3	498	P	P	P	P	P	P	N	N
Al-Anbar	1.4	393	P	P	P	P	P	P	N	N
Kerbalaa	1.0	549	P	P	P	P	P	P	P	N
Wasit	1.2	299	P	N	P	P	P	P	N	N
Al-Najaf	1.2	744	P	P	P	P	P	P	P	?
Al-Diwaniya	1.1	578	P	P	P	?	P	P	N	N
Al-Muthana	0.7	191	P	P	P	P	P	P	P	N
Misan	1.0	243	P	P	P	P	P	P	N	N
Thiqr	1.8	441	P	P	P	P	P	P	N	N
Erbil	1.5	358	x	x	x	x	x	x	x	x
Duhok	0.9	302	x	x	x	x	x	x	x	x
Sulaimania	1.7	301	x	x	x	x	x	x	x	x
Total	31.9	15172	-	-	-	-	-	-	-	-

Abbreviation : NCCP : National Cancer Control Program

DOH : Directorate of Health ( Province Level )

P : present    N : not present    ? : data not supplied

x : surveillance sheet not returned by DOH



**Annex 1 / Table 5 : Iraqi NCCP Status - 2008 / Treatment**  
( Data taken from official NCCP surveillance sheets filled by DOHs )

Province	Population Millions 2008	Cancer Cases 2005	Treatment Facilities				Specialists				Chemo therapy availability
			Cancer Hosp.	Radio therapy Unit	Adult Onco Unit	Ped. Onco Unit	Radiation Oncologists	Medical Oncologists	Ped. Oncologists	Hemato logist	
Baghdad- Rasafa - Karkh -Medical City	7.134	5009	P	P	P	N	P	P	N	P	....
			?	?	?	?	?	?	?	?	?
			N	?	?	?	N	N	?	?	?
Mosul/ Nineveh	3	1032	P	P	P	P	P	P	P	P	.....
Basrah	2.6	754	N	?	P	P	P	P	P	P	.....
Babil	1.7	1054	N	?	P	P	P	P	N	N	...
Kirkuk	1.2	679	N	N	P	N	P	N	N	N	?
Salah Aldin	1.2	292	N	N	P	N	P	N	N	N	....
Dyala	1.3	498	N	?	N	N	N	N	N	P	.....
Al-Anbar	1.4	393	N	.....	P	P	P	N	P	N	.....
Kerbalaa	1.0	549	N	N	N	N	N	P	P	P	....
Wasit	1.2	299	N	?	P	N	N	N	?	P	.....
Al-Najaf	1.2	744	N	?	P	?	P	P	P	P	....
Al-Diwaniya	1.1	578	N	N	N	N	N	P	N	P	....
Al-Muthana	0.7	191	N	N	N	N	N	N	?	?	.....
Misan	1.0	243	N	N	N	N	N	N	N	N	....
Thiqr	1.8	441	?	?	?	?	?	?	?	?	?
Erbil	1.5	358	×	×	×	×	×	×	×	×	×
Duhok	0.9	302	×	×	×	×	×	×	×	×	×
Sulaimania	1.7	301	×	×	×	×	×	×	×	×	×
Total	31.9	15172	-	-	-	-	-	-	-	-	-

Abbreviation : NCCP : National Cancer Control Program

DOH : Directorate of Health ( Province Level )

P : present    N : not present    ? : data not supplied

× : surveillance sheet not returned by DOH



- Advocate for the provision of affordable screening programmes for which there is evidence of efficacy in the population in question. Undertake pilot projects that are designed to evaluate the feasibility and efficacy in populations in which the screening technology has not yet been tested

## Cancer treatment

- Promote the development and use of cancer treatment guidelines that are relevant to local needs and resources. Ensure that sufficient treatment, rehabilitation and palliative care facilities and well-trained staff are available to meet the physical, social and emotional needs of patients with cancer
- Take steps to tackle the many barriers to optimal pain control. Work with governments to address the over-regulation of pain medicines. Cooperate with international organizations, including the International Narcotics Control Board and the World Health Organization, to ensure that global implementation of the UN's international drug control conventions do not unduly interfere with legitimate efforts to advance access to pain medicines for cancer patients in pain
- Work with the pharmaceutical industry to increase access to cancer medicines that are affordable and of assured quality
- Increase the number of health professionals with expertise in all aspects of cancer control by providing specialist training opportunities and fellowships to enable professionals to study in specialist settings
- Raise awareness about the impact of health worker emigration on the ability of countries to provide adequate levels of cancer care and work collectively to address global and national health workforce shortages and the resultant deepening of inequity
- Increase investment in independent basic and applied cancer research and accelerate the translation of research findings into clinical and public health practice
- Encourage cancer research organizations in different countries to collaborate, share data and define complementary research objectives to optimize the use of the limited funds available for cancer research and reduce duplication of effort

## Progressing towards the 2020 targets

- Through its member organizations, now more than 300 in over 100 countries, the International Union against Cancer (UICC) will promote partnerships and international collaboration aimed at accelerating progress towards achieving the 2020 targets
- Given the huge variability in cancer burden and service provision throughout the world, the UICC will encourage members to use the World Cancer Declaration as a template to develop regional or national cancer declarations that can better reflect local needs and priorities and allow for more accurate quantification of targets where data exists
- The UICC will take responsibility for preparing a report every two years on the progress made towards achieving the 2020 targets. These reports will be presented at the biennial World Cancer Congress



## Background

The World Cancer Declaration 2008 is a tool to help cancer advocates bring the growing cancer crisis to the attention of health policymakers at national, regional and global levels. It represents a consensus between foundations, national and international non-governmental and governmental organizations, professional bodies, the private sector, academia and civil society from all continents that are committed to the vision of eliminating cancer as a major threat for future generations.

The International Union Against Cancer (UICC) is the leading non-governmental organization dedicated exclusively to global cancer control.

The UICC encourages partnership within the framework of the World Cancer Declaration: By working together, we can more easily implement the priority actions and achieve the 2020 targets.

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