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N6

The Future Of Iraq Project



**Public Health and
Humanitarian Needs**

Working Group

UNITED STATES DEPARTMENT OF STATE
REVIEW AUTHORITY: SHARON E AHMAD
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Public Health and Humanitarian Needs Working Group

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(*) Reflects consensus of the participants in the working group. Other papers reflect the views of their authors.

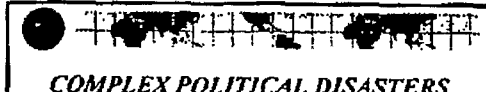
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Emergencies


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COMPLEX POLITICAL DISASTERS

"...situations in which the capacity to sustain livelihood and life is threatened primarily by political factors, and, in particular, by high levels of violence."



Political Emergencies

- Politically driven resource wars
- Vulnerable populations, cultures, ethnic, minority groups most at risk
- Represent catastrophic public health emergencies



Complex Emergencies

Direct Effects	Indirect Effects
• Injuries/Illness	• Population displacement
• Deaths	• Disruption of food
• Human rights abuses	• Destroyed health facilities
• International Humanitarian Law abuses	• Destroyed public health infrastructure
• Psychological stress	
• Disabilities	

- Relief Community**
- International Organizations
 - Non-governmental Organizations
 - Private Governmental Organizations
 - Donor Agencies/Countries
 - Militaries

- International Organizations**
- United Nations Agencies
 - Functionally separate from the UN
 - > UNHCR (UN High Commissioner for Refugees)
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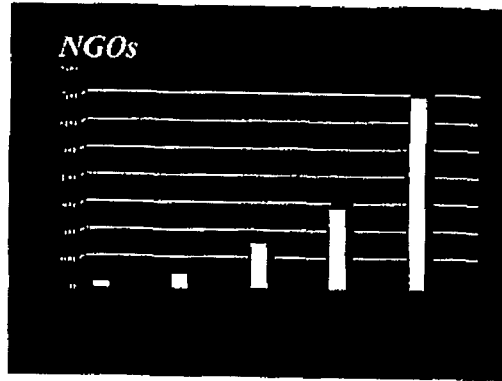
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- International Committee of the Red Cross (ICRC)
 - Federation of Red Cross & Red Crescent Societies (IFRC/RC)
 - International Organization for Migration (IOM)

- Private Organizations**
- US Agency for International Development/Office of Foreign Disaster Assistance (USAID/OFDA)
 - EU/ECHO (Europe)
 - JICA (Japan)
 - AUSAID (Australia)
 - ODA (England)

Ability under international law to by-pass governments and go directly to the people

Organized around function:

- > Relief
- > Development
- > Relief & development
- > Advocacy



COMMUNITY

NGOs, UN AGENCIES, RC/RC:

- 382 deaths in 13 years, 2/3 from intentional violence
(vs 70% unintentional deaths in 1985 Peace Corps study)

UN Peacekeepers:

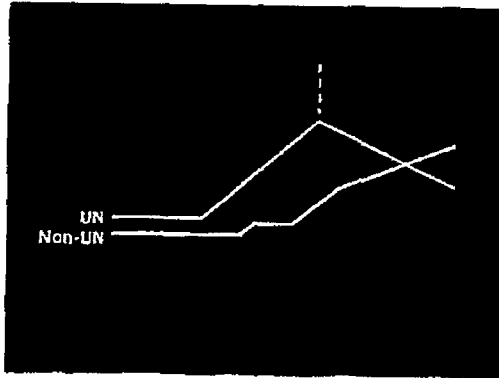
- 1992-1998: 67% of 700+ deaths from intentional violence

Burnham, Seet
Lancet 2001

UN Peacekeeping Forces (UN Charter, Chapter 6)

UN Peace Enforcement (UN Charter, Chapter 7)

Article 51



VII Response

- Requires military intervention to cease violence
- Military participation in declining mortality & morbidity until safe for NGOs
- Strict monitoring of human rights and international humanitarian law*
- Transition to Chapter VI force with signing of peace agreement *

Epidemiological Models of Complex Emergencies

- Developing country
- Developed country
- Chronic/smoldering

Developing Country Model

ACUTE PHASE EMERGENCY

Health Profile:

- > Severe malnutrition
- > Outbreaks of communicable diseases
- > High crude mortality rates (CMR)
- > High case fatality rates (CFR)

*Berkholder & Teolis, Lancet '96

Mortality Rates

- Mortality rates define the stages of a complex emergency, expressed as crude mortality rates (CMR)
- Under age 5 mortality rates second most common indicator

Mortality Benchmarks

- < 0.5/10,000/Day = Normal rate in developing countries
- > 1.0/10,000/Day = Serious Situation
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- > 5.0/10,000/Day = Severe Famine, Disaster
- < 1.0/10,000/Day = Effective Relief Program

*Small change represents major difference

Mortality Rates

- Mortality rates 7 to 20 times the baseline population
- Rates of 5-10 deaths/10,000/day equals 20-60 % of population dying in a year
- Examples:
 - > Rwanda: 60 times baseline
 - > Unaccompanied minors: 100-800 times baseline
 - > Internally displaced persons (IDPs) rates higher overall

Case-Fatality Rates

- Measure the severity of a disease
- Defined as proportion of cases which are fatal within specific period of time
- WHAT DISEASE ACCOUNTS FOR MORE DEATHS IN MALNOURISHED CHILDREN THAN ANY OTHER?

Mortality/Morbidity

- | Kurdish Crisis | Somalia | Rwanda |
|-----------------------|----------------|---------------------|
| • Dehydration | • Starvation | • Dehydration |
| • Common Pathogens | • Measles | • Cholera/dysentery |

> **than 75% of epidemics in 1990s occurred in complex emergencies**

• **Supplementary/therapeutic feeding programs**

• **Nutritional & health assessments**

• **Vaccine control measures**

• **Essential drugs**

• **Surveillance programs**

• **Develop and expand Health Information System (HIS)**

TIMOR

• **150,000 IDPs in 200 camps**
> **CMR 2.1/10,000/day**

- **Focus on outbreak control:**
- > food/water-borne
 - > HIV/AIDS/malaria/TB
 - > Dengue, Japanese B Encephalitis

AFGHANISTAN

• **High maternal mortality rates:**

- > lack of skilled maternal health workers
- > childbearing at extremes of reproductive age
- > inadequate birth spacing
- > compromised nutritional status

AFGHANISTAN

- High child mortality and morbidity:
 - > major causes are preventable
 - > respiratory infections
 - > diarrheal diseases
 - > malaria
 - > high levels of chronic & micronutrient malnutrition
 - > measles and tetanus

Congo February-April 2001

- Congo is assessment challenged: *Few demographics, hostile territory with rapidly moving and easily lost populations*
- 2.5 million excess deaths (CI: 2.0-4.0)
 - > Only 10% deaths due to war related violence
 - > Remainder are preventable: diarrhea, malnutrition, malaria
- 75% of children born during 2001 will die or before age 2 years

Roberts L. IRC, NYC

Complex Emergencies

- Initial assessment
- Water and sanitation
- Food and nutrition
- Shelter and site planning
- Health care
- Control of communicable diseases & epidemics
- Public health surveillance
- Human resources and training
- Coordination

Prevent excess mortality and morbidity

Grant priority to non-medical actions:

- security/protection
- food
- water
- sanitation
- shelter

• Inter-sectoral coordination **MOST** critical

Developed Country Model

FORMER YUGOSLAVIA

- Relatively healthy populations with demographic & disease profiles of Western countries
- Primarily war-related trauma: Advanced weaponry
- Chronic diseases, elderly undernutrition
- Under age 5 did not have wasting
- Few epidemics

Bertholder BT, et al: Perinatal Migration & Mortality Proceedings, 2000

Developed Country Model

- CMRs from Kosovo, Macedonia and Albania low: *never reached daily rate of 1.0/10,000/person/day*
- War-related trauma: 1.1/10,000/day, 63% elderly
- Rape, traumatic exposures common
- Indicators for reproductive health & psychological morbidity needed

Statistics

Sarajevo (Kosevo Hospital): WHO Data

Issue	Pre-War	War
Infant Mortality	15.8 per 1000	28.9 per 1000
Still Births	7.5 per 1000	12.3 per 1000
Premature Births	5-6%	12%
Serious Malformations	0.37%	0.73%

Statistics

Issue	Pre-War	War
Fertility Rate	13.8 per 1000	2.2 per 1000
Abortions	28.6% of pregnancies	64.3% of pregnancies
Average Birth Weight	3700 gms	3100 gms

KOSOVO

- IDPs 55-63% children
- **Most vulnerable:**
 - > Boys 16-18*
 - > Elderly men*
 - > Both genders 0-5 years

**Indiscriminate and direct targets:
used as evidence in Hague prosecution*

Salama & Spiegel Lancet, 2000

Emergencies

SUDAN: since 1955

- Children grow up chronically malnourished
- Know only a culture of violence
- Little access to healthcare & education
- Only expatriate healthcare
- Reproductive health considered a luxury

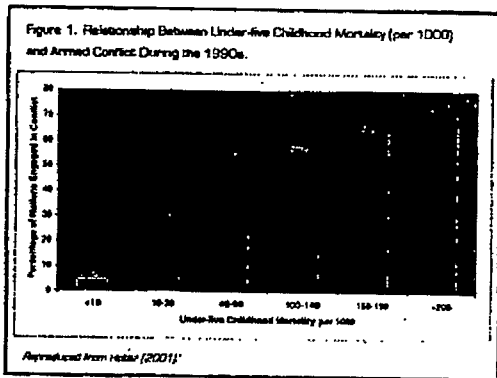
Recipient-level Assessment

<p>Developing Countries:</p> <ul style="list-style-type: none"> • Primary care • Pediatric & OB/GYN • Infectious Disease Specialists • Public Health • Preventive Medicine 	<p>Developed Countries:</p> <ul style="list-style-type: none"> • Surgical Specialties • Emergency Medicine • Anesthesia • Public Health
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VanRooyen M, et al: PDM 2001

Office of the Coordinator for Humanitarian Assistance (OCHA):

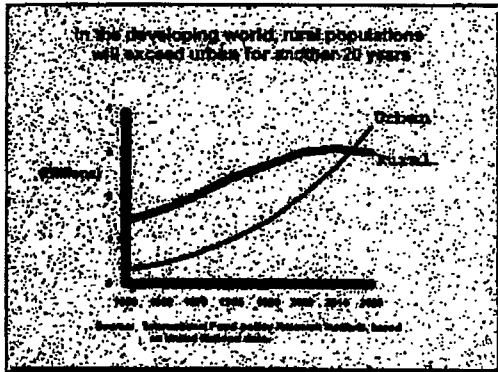
- *Suggests 73 countries at risk with differing degrees of instability*
- *Total population of 1800 million people*



- Highest Under Age 5 Mortality Rates**
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- Excess Deaths: 2nd to political leadership**
- Rule by intimidation & fear
 - Avoid peace overtures
 - Sociopathic personality based
 - Somalia, Cambodia, Serbia, Iraq
 - Incorporate psychological profiles in decision-making process

- Population:**
- Altering patterns
 - urban poor
 - numbers of major cities
 - density of population
 - humanitarian assistance moving from rural to urban areas



- Public Health:**
- Redefining "public health"
 - Mortality/morbidity dependent on:
 - > infrastructure
 - > moral integrity of governments
 - Public health as a strategic and/or security issue
 - Not prepared to protect the urban public health infrastructure

IRAQ:
Expectations

- **United Nations Agencies:**
 - > OCHA, WFP, UNICEF especially;
 - > UNHCR in Iran, Jordan
- **Later:**
 - > UNDP
- **ICRC; IFRC/RC:**
 - > ICRC already established; Iraqi Red Crescent Society & sister Societies (e.g., Jordan)

- **NGOs**
 - > Northern Iraq: support for most vulnerable and mine-affected communities
 - > Baghdad-controlled Iraq: currently 7 NGOs allowed by Iraqi government
 - > Southern Iraq: ICRC plus Assisting Marsh Arabs & Refugees (AMAR) in Iran
- NGOs will expand tremendously

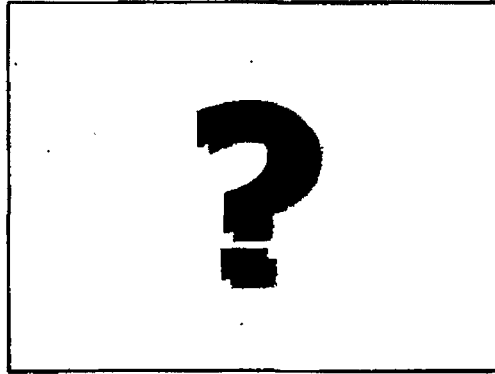
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- Coordination

- Consequences of WMD event*
- Response similar to complex emergencies
 - Large numbers of refugees and IDPs
 - Major assessments of food & water
 - Shelter, health, food, water, sanitation and fuel requirements
 - HIS and field laboratory assets

Lethal mix of.....

- Inequalities
- Poverty
- Injustice/absence of rule of law
- Oppression
- Cultural & religious incompatibilities
- Ignorance
- Racism

These must be corrected to obtain sustainable development



Health in Complex Emergencies

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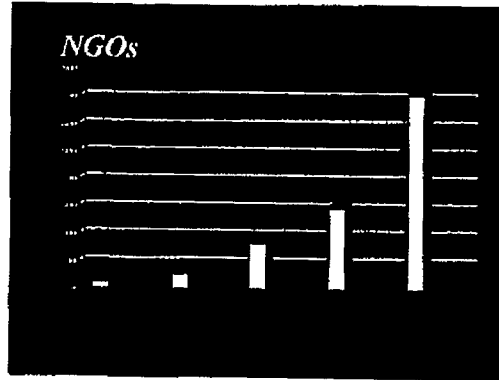
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BASED HUMANITARIAN COMMUNITY

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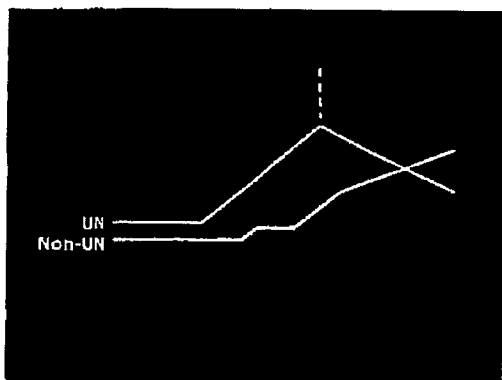
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Specific Infant Mortality/Morbidity

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Phase II

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- Nutritional & health assessments
- Vaccine control measures
- Essential drugs
- Surveillance programs
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4-11 Ten Priorities

Complex Emergencies

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4-11 Of Health Workers

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Effects of War on Birth Statistics

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**Chronic Suffering in
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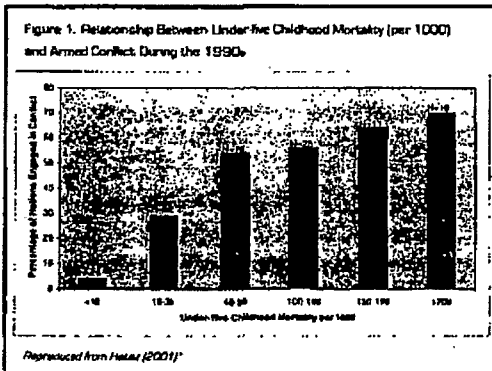
*Example Healthcare Personnel:
Recipients-level Assessment*

Developing Countries:	Developed Countries:
◦ Primary care	◦ Surgical Specialties
◦ Pediatric & OB/GYN	◦ Emergency Medicine
◦ Infectious Disease Specialists	◦ Anesthesia
◦ Public Health	◦ Public Health
◦ Preventive Medicine	

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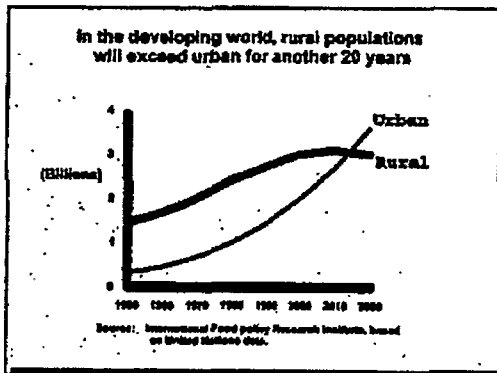
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- Population:**
- **Altering patterns**
 - *urban poor*
 - *numbers of major cities*
 - *density of population*
 - *humanitarian assistance moving from rural to urban areas*



THE FUTURE

Public Health:

- Redefining "public health"
- Mortality/morbidity dependent on:
 - > infrastructure
 - > moral integrity of governments
- Public health as a strategic and/or security issue
- Not prepared to protect the urban public health infrastructure

IRAQ:
Expectations

HUMANITARIAN ORGANIZATIONS

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REQUIREMENTS

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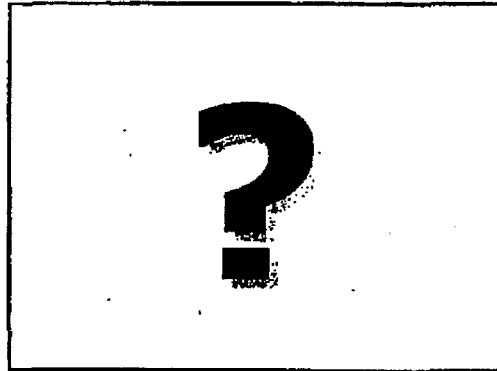
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Complex Emergencies
Lethal mix of....

- Inequalities
- Poverty
- Injustice/absence of rule of law
- Oppression
- Cultural & religious incompatibilities
- Ignorance
- Racism

These must be corrected to obtain sustainable development



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Project Health Care for Iraq

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Data; diseases and health services

WHO; credible

memory; not credible

visitors and ex-patriot and others; +/-.

To plan:

Current credible data on resources,
human and material;

Water; filtration and treatment

**Sewer; + disposal of waste and
biohazard materials.**

Consider an incinerator

**Utility; electricity (220v and 50 cycle)
gas fired equipment.**

Refrigeration, space heaters.

Emergency

Prepackaged clinics

Temporary; short term;

Service specific patient population;
limited in services;

Need a back up larger multi-service
building (hospital).

Use existing clinics and hospitals

Repair, clean and disinfect,

Refurnish,

Re-equip;

Re-design function;

Trauma patients,

Trauma rooms

Blood and expanders

Medication, and life saving equipment.

Human Resources;

Doctors;

Nurses;

Technicians;

Pharmacist;

Engineers;

Doctors and other health care providers

**in Iraq have to be part of the
rehabilitation process, at early stage.**

Contaminated patients;
Bacteriological;
Chemical;
Radio-active;
Needs for decontamination equipment,
(a minimum a shower).
Acute patients,
including behavior changes.
Consider isolation rooms for all.

Essentials for a Health Care Facility

Environment of care:

Planning for the space, clear circulation of occupants, equipment, supportive environment, and resources needed to safely and effectively support the services provided.

Planning and designing is consistent with the hospital's mission and vision and the cultural background, and cognitive abilities of patients served.

Structure

Entrance; Lobby; registration, family waiting area

Patient care areas; (Gender specific*);

ER, OR, ICU*, Medical Surgical units*, Obstetric,
Pediatrics; Outpatient clinics.

Patient care support services;

Laboratory, Pharmacy; Imaging (X-ray), Dietary,
Medical records storage, Staff lounge, Space for
storage.

Driveways, parking, and grounds

Structure with function

Utility; Electricity-220v, 50 cycle

Water- a must, filtration and treatment.

Sewer and drainage system;

Waste and Biohazards disposal; ? an incinerator.

■ Air conditioners and space heaters;
Refrigerators for food and for medications,
Sterilization units;

Transportation; internal and external

Communication equipments

Telephones, pagers, intercoms.

Fire extinguishers;

signage;

computers; type writers.

Light (both natural and artificial),
Clarity of access (both exterior and interior),
Physical cues to way-finding outside and inside the building(s),
Control,
Privacy (visual and auditory),
Order,
Space size and configuration appropriate and consistent with the clinical need,
Security,
Convenient patient flow, and
Efficient layouts that support staffing and overall functional operation

■ **Management of information**

**Patient-specific data and information;
Designing the Structure of the Information-
management System;
Defining and Capturing Data and Information.
Aggregate data and information.
Analyzing Data and Transforming It Into
Information;
Transmitting and Reporting Data and Information
internally externally.**

Surveillance, Prevention, and Control of Infection

The goal of the surveillance, prevention, and control of infection function is to identify and reduce the risks of *acquiring* and *transmitting* infections among patients, employees, physicians, and visitors.

- Surgical site infections.**
- Nosocomial infections in special care units.**
- Infections caused by organisms that are antibiotic-resistant or in other ways epidemiological important.**
- Nosocomial tuberculosis and other communicable diseases, especially vaccine-preventable infections.**
- Infections in neonates.**

■ Processes to reduce infection

Disinfect the building, equipment and furniture.

Purify the water (filtration and treatment).

Enforce preventive measures.

Proper hygiene for both patients and staff.

Vaccination.

Equip Laboratory with (infection control in mind).

Avail adequate cleaning supplies and antibiotics.

Isolation techniques and space.

Ensure a functioning waste disposal process.

■ Endemic diseases

Malnourishment

Parasitic;

Schistosomiasis Hematobium, Echinococcus,

Malaria, lice, ticks and mites

Bacterial;

Tuberculoses, amoebic dysentery, typhoid and

? Typhos.

? Cholera

Other common bacterial and viral disease.

Depression.

- **Human resources**
 - unknown in availability and quality (competency).**
 - Nursing;**
 - Physician; Dentist;**
 - Pharmacist;**
 - Techs (Laboratory, X-Ray, Respiratory, Physical therapy, Operating room staff)**

Support staff,

Engineers;

Biomedical engineers;

Social services.

Security; and transport;

Nutrition experts,

Cooks and kitchen staff,

Housekeeping;

**Case managers, Education staff, and QA
staff?.**

■ Vision for Management

Administrator; for daily management

VP for patient care, head nurse,

VP for medical affairs, (a medical director if CEO not a doctor).

VP for finance (not a doctor).

Advisory Board; physicians, head nurse, finance officer, pharmacist, (public representation, ? from schools and local district appointee).

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Progress Report of
Future of Iraq Project
Public Health and Humanitarian Assistance Working Group
16-17 October

The Public Health and Humanitarian Assistance Working Group met 16-17 October 2002 preceded by a welcoming reception on the evening of 15 October.

The day-and-a-half discussion eventually settled into a framework of timing of response needs:

- Emergency, "trauma" (the first week)
- Urgent, "filling gaps" (the first month)
- Short-term, "stabilizing" (up to six months)
- Longer-term, "improving and rebuilding" (more than six months).

Some participants argued that the framework should include an additional distinction between preventive and curative activities. While the group agreed this would be useful, time did not permit these distinctions to become evident in further discussion. See attached list of items generated by the Working Group for each period of time.

Dr. John Fawcett spoke briefly about the role of the UN in humanitarian crises, cautioning host governments against allowing UN agencies too much control and authority.

Dr. Frederick ("Skip") Burkle presented a "reality check" for the Working Group, providing them with examples from past humanitarian emergency experiences and possible scenarios for Iraq. Dr. Burkle emphasized that the first two or three weeks of an emergency are often extremely dangerous/insecure and highly chaotic. Consequently the activities during the initial emergency period should be left for professional international and non-governmental organizations. He pointed out that subsequent critical periods (urgent and short-term) require deliberate attention to coordination among operational agencies (what they do, where they operate, which populations they serve) and establishment of processes and procedures that will be a foundation for long term activities.

The meeting ended with a decision to create open, non-binding subgroups in five categories.

- Immediate, emergency supplies and logistics
- Education – for immediate public awareness and subsequently for medical and other health care professions
- Policy – for long-term public health and health planning
- Infrastructure – to examine assets and needs in the water, sanitation, energy resource areas, as well as health and institutions (clinics, hospitals, etc.)
- Outreach – to non-represented professions, professional associations, other FOI, working groups, the UN

The conclusion of this Working Group was that it should be and be seen as independent of the US government and highly focused on a consultative and advisory role to the USG, UN agencies, and health focused NGOs both inside and outside Iraq.

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PUBLIC HEALTH AND HUMANITARIAN SERVICES WORKING GROUP From October 16-17, 2002 Meeting

Issues to Note at Various Times During the Crisis

EMERGENCY (1 Week) - "War Trauma"

- Ask in-country people what their needs are
- Setting up –
 - trauma center (make mobile)
 - refugee camps
 - crisis units for biological/chemical
 - crisis mental health (including drugs, PTSD)
 - communication networks
 - water purification
 - mobile clinics
 - triage system
 - various "subgroups"
- Public awareness of safe food and water storage
- Tetanus
- Food distribution
- Antidotes for chemical weapons (also masks)
- Cold chain maintenance
- Garbage collection
- Sewage system
- Food – Humanitarian Daily Rations (HDRs)
- Mobile clinics
- Water – provision, distribution of safe water
- Blood supply
- Stocking hospital – operating theaters, burn units, ICUs; antibiotics, antiseptics, anesthetics, sedatives, IVs, oral rehydration fluid, other fluids
- Electricity and water supply (purification, reverse osmosis)
- Communication with field
- Work with NGOs (local and international)
 - Entry regulations/registration
- Security—how, by whom, how will people know
- Restore confidence in systems
 - Establish DOS money for physician retraining
- Training in leadership, management, and administration
- Maternal/fetal health
- Advance registration of outside MDs who are willing to go/work
 - Inside and outside Iraq – brain, chest, ortho, heart, neuro, critical, internists, infectious diseases
 - Look at academic medicine, residents with loan forgiveness
 - Facilitate/ease temporary and long-term return

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- Para-professionals, nurses, other auxiliary health workers, emergency medical technicians, physical therapy, lab technicians
- Public awareness of place and services available: radio station, leaflet drops
- Infectious disease impacted by war
- Climate exposure
- Ambulances
- "Care packages"
- Working with other regional countries
- Mobilize in-country health workers NOW
- Transportation
- Cooperation with military/ies (including sending trauma specialists, disaster teams)
- Consult with experienced "war trauma"/health teams (including mental health)
- Distribution of care, services, drugs, specialists, information, decisions, populations, needs (urban/rural, centralized/decentralized)
- Coordinate with religious community (example: dealing with the dead, dealing with panic; to engender trust and hope)
- Media/IT plan (Free Iraq, VOA, satellite TV, local radio and TV, jamming, radio, leaflets)
- Support proper/good medicine creative practices and processes
- Disabled people – old and new
- Work with international organization –WFP, UNICEF, IOM, UN, etc.
- Social diseases
- Political issues (example: deportation, ID)
- Financial plan for stability
- Mechanisms to air grievances
- Widows and woman-headed households
- Revenge killings
- Transparency –against corruption
- Democratizing institutions
- Financial security – unemployed
- "Help community help itself" – particularly in long-term issues
- Market Iraq! for researcher
- Coordinate and collaborate with external education and research institutions
- Work to improve morale of health care professionals
- Health for all? Health as a right? Health as a privilege?
- Eliminate "us-and-them", "good years-bad years" distinctions

URGENT (1 Month) – “Rebuild and Fill Gaps”

- *Continue “Emergency” activities*
 - Water, air, soil safety assessments (use experienced experts)
 - Prepare various scenarios
 - Continue rationing system—household food security—with assessment
 - Restore of sewage system
 - Resuming garbage collection
 - Electricity
 - Drugs availability – including psychotropics
 - Disease/health assessment (including nutrition, epidemiology—water-borne; vector borne)
 - Renewal of supplies, drugs stocks
 - Rehabilitate major medical centers
 - Resume medication education (immediate and further re-education—look for academicians; send journals and books; telemedicine)
 - Example: rehydration therapies, prevention
 - Through local and distant workshops
 - Re-establish supplies distribution routes—including storage
 - Train/re-train nurses and para-medical personnel – knowledge exchange
 - Prepare “crash courses” in family medicine and other basic areas
 - Re-establish monitoring and evaluation processes
 - Feeding for malnourished
 - Maternal/fetal health – infant formula
 - Infections/vaccines/diarrhea
 - Nutrition and household food supply
 - “Healthy Family” education for women/mothers
 - Polio vaccine
 - Tuberculosis care
 - “Internet-in-a-box” for health care
 - Mental health care
 - Child centers for family reunification
 - “Children’s Welfare Centers”
 - All issues should be “taught,” “trained”

SHORT-TERM (6 Months) – “Stabilize”

- *Continue “Urgent” care activities*
- Continue food rationing for household food security
- Continue assessment and continuing education; mentoring – Training of Trainers
- Consider ways of decentralization
- Assessment of local NGOs and their capacities—build
- Deal with family breakdown
- Establish multidisciplinary epidemiology surveillance teams and systems – centralized, “nuclear”
- Rehabilitate medical/health schools (exchanges) – nursing, lab, technicians
- Re-assess new/changing needs of country
- Begin rebuilding water sanitation systems
- Begin groundwork for primary health care—needs and assets; tertiary care needs and assets
- Focus on infrastructure
- Begin/keep long-term planning (in light of lifted sanctions)
- Integrate NGOs remaining – coordination
- Move external experts from directive –consultation
- Engage positively US/drug companies at policy level
- Move from NGO and donor dependency – to self sustainability
- NGO exit strategy
- Investigate/audit oil for food
- Physical therapy
- Mental Health care – anger management, DV, anxiety, trauma (ology) – with public education
- Establish antiseptic procedures for sustainability
- Emphasize hygiene, vaccines (use school systems)
- Influx of returning refugees

LONG TERM (6 Month+) – “Improve and Expand”

- *Continue “Short-term” activities*
- Create database of health services and institutional assets
- Rehabilitate medical/health education system, including licensing, residency programs
- Medical insurance/subsidies for poor
- Social securities for the unemployed
- Establish “epidemic” response teams
- Establish “medical exchange” programs with grant money
- Population planning and birth control
- Begin to plan emergency health plans/systems
- Establishing/reinstating health care policy
 - Nationalized health care for basics
 - Pay for specialty care
 - Incentives for providers
 - Address barriers to access – gender disparities
- Explore public-private partnerships for care provision
- Develop food and drug regulatory agency
- Detoxification plans and implementation
- Health policy infrastructure development and planning – long-term visioning and projects
- Rebuilding family unit (worries: girls’ prostitution, employment, children’s education)
- Focus on education and appropriate recruitment
- Address access discrepancy issues
- Health screenings (hearing, vision, cancer, etc.) through schools
- Rebuilding water sanitation programs
- Maternal, child health programs
- Mental health, long-term effects, implications, and treatment, particularly for children
- Create humanitarian relief coordinator
- Reflexive assessment of what exists and has been done, by whom
- Establish data collections (registries) and analysis capabilities
 - Centrally controlled/located
 - Used for project development
- Develop “Public Health” as a key part of medical curriculum, separate public health school
- Work to restore an older, but structured care distribution system with low or no fees
- Establish a model of “healthy people” – household individual
- Restructure medical education system to be more “free thinking” education
- Work on specialty care delivery and methods (oncology, for example)
- Create systems to bring in new, updated medical/health information (including regional libraries)
- For disabled: schools, prosthetics
- Consider management for institutions

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- Institute evaluation and monitoring plans and processes
- Consider issues for the elderly
- Rehabilitate nursing field, physician assistants
- Upgrade medical/health curriculum and residency programs and continuing education
- Work more deliberately with NGOs
- Family/household/awareness on domestic violence, disability
- Remember maintenance of equipment (train technicians)
- Develop in-country scientific community infrastructure for mutual support, research, external exchange and collaboration
- Address women along whole life cycle
- Focus on public prevention measures (ex. Mammograms, screenings)
- Be up-front on "taboo topics" – alcohol, drug use, etc.
- Provide computer access
- Address land mine removal and victim care
- Begin to establish medical licensing procedures
- Make sure professionals and para-professionals other than MD are trained, retrained, provided continuing education, and then respected and used
- Implement decontamination procedures
- Focus on appropriate technology (for info and health)
- Include family planning
- In health system planning, consider rural hospitals and community clinics

BETWEEN NOW AND 1 WEEK

- We here are "consultative", "advisory"
- Make subgroups
 - Immediate, emergency
 - Education – immediate public information; medical health training
 - Policy-making – for health and public health
 - Infrastructure – urban development and planning for public health, service organizations, health institutions, rural
 - Outreach
- Ensure cross-presentation of PHWG with other working groups
- Be Iraqi health advisors/consultants to UN, international organizations, NGOs
- Do comprehensive literature review of current situation and resources for health care in Iraq
- Develop a public awareness of potential in Iraq for outsiders "outreach"
- Documenting "our" experiences in this process
- Investigate oil for food – plan to end it
- Identify current local, operating NGOs
- Explore VOA, BBC, Free Iraq, etc. opportunities

Salahaddin University

Salahaddin University, formerly University of Sulaymania (founded in 1968) was established in the academic year 1982-1983. It is the largest of the three universities in Iraqi Kurdistan, situated in the provincial capital town of Arbil. It is a member of International Association of Universities. Currently Salahaddin University has 12 colleges, which are:

- | | |
|--|-----------------------------------|
| 1. College of Science | 2. College of Engineering |
| 3. College of Arts | 4. College of Education |
| 5. College of Administration and Economics | 6. College of Medicine |
| 7. College of Law and Politic Sciences | 8. College of Law (Evening) |
| 9. College of Dentistry | 10. College of Agriculture |
| 11. College of Pharmacy | 12. College of Physical Education |

The university has experienced enormous growth in recent years, especially after the historic uprising of Kurdish people in the spring of 1991 and the establishment of the first parliament in Iraqi Kurdistan. The university has received special care and support from the Kurdistan Regional Government.

The university has, as a part of its scientific strategy, tried to establish scientific cooperation with other universities and scientific institutions worldwide. The presence of three universities and the divergent and potential resources in the area provides a good basis for such cooperation in future.

If you are interested in learning more about the university, please feel free to contact us:
Address:

Salahaddin University
Arbil/ Iraqi Kurdistan
Tel: 00873762566859
Fax: 00873762566861
E-mail: Salahhaw@web-sat.com

University of Sulaimani

COLLEGE OF MEDICINE

med@univsul.com

The decision to open the College of Medicine in the University of Sulaimani was made in 1972, but it was only in 1977 when the University finally admitted the first 91 students for medical training. The University of Sulaimani never witnessed their graduation, as by the year 1982-83, when the first graduation took place, it was closed down and transferred to Hewler (Erbil). The first graduates of the College, therefore, were the graduates of the University of Salahaddeen.

The necessity to provide Kurdistan with trained medical staff prompted the Kurdistan Regional Government to include the College of Medicine into the list of the three colleges to be re-opened first. In 1992, on November 15, the College of Medicine opened its doors to the students alongside the Colleges of Agriculture and Languages.

The students who pass the secondary school final Baccalorite examinations (scientific branch) gaining 90 marks out of hundred and above are entitled to submit their applications, provided they have achieved Grade A in Biology, Chemistry, Physics and English language in the first attempt. The top 80 - 90 successful applicants will be accepted, starting from the highest mark and down to the number 80th or 90th. All the applicants are also interviewed by a special college committee for assessment of their mental and physical status. Facilities available at both the medical college and affiliated teaching hospitals:

Facilities available at college of medicine

1. Four lecture halls : Three of them contain 360 seats (120 seats in each) and the 4th hall 50 seats .
Each hall contains : Audiovisual facilities , black boards , overhead projectors, screens , T.V. , computers and LCD projectors .
2. Twelve laboratories : Anatomy , Biology , Chemistry ; physics , Computer Center , Physiology , Biochemistry , Histology , Pharmacology , Pathology , Parasitology and Microbiology.
Each laboratory contains : Microscopes (of different types) , facilities for different experiments , computers , charts , necessary instruments ,teaching slides , specimens and other equipments .
The anatomy laboratory is provided with human cadavers.
3. One research laboratory contains: Fluorescent microscopes , light microscopes, cold centrifuges, centrifuges , micro centrifuge , digital spectrophotometer,water bath , shakers , striers , balance ,PH meter , pipettes, glassware , ECG , peak flow meter , vitalograph , oven ,autoclaves , tuning forks & glucometer .
4. Audiovisual unit: contains: videocassettes, sonic cassettes , clinical teaching slides , slide-projectors , photo camera , digital camera & video camera.
5. Museum: contains skeletons , bones, skulls , specimens , anatomical dolls , charts and many other demonstrating facilities
6. Two libraries:
 - A. Teaching staff library: contains English Medical books, journals and periodicals.
 - B. Student library: contains English Medical books, journals and periodicals.
7. Computer unit: contains: Computers , printers , scanners , medical CDs and LCD projectors .
8. Internet access: All teaching staff and students have access to internet .
9. E-mail : med@univsul.com
10. Annual JSMC : Journal of Sulaimani Medical College
11. Annual JSMC- student :
12. The followings have been requested under (986 UN Resolution) of oil for food program .
 - a- Fluorescent Microscopes
 - b- Flowcytometry
 - c- Electron microscope
13. Out patient medical center to provide out patient medical care for all university teaching staff and students.
14. The college administration: A group of employee to run the daily administration and financial affairs of the

college.

15. SCHEIK contribution: Is a committee of British citizens of Kurdish origin in UK based in London to support the college by donating books, journals, periodicals, teaching facilities and by sending a team annually to participate in the final graduation examinations of the sixth year students as co-examiners and also by arranging short courses of clinical and theoretical teachings.

16. College activities :

- Persistent weekly one hour case presentation in the clinical meetings for all teaching staff , students & Doctors in the hospitals held by college teaching staff .
- Persistent weekly one hour medical seminars for fifth and sixth year students .
- Persistent weekly one hour films presentation .
- Journal club for the sixth year students .
- Weekly tutorial sessions for the final three years students .

Facilities available at the affiliated teaching hospital

1. There are five teaching hospitals affiliated to the college of medicine :

- Sulaimani Teaching Surgical Hospital : (General surgery , orthopedic and minor surgical branch)
- Sulaimani Teaching General Hospital : (General medicine , infectious diseases and psychiatry)
- Sulaimani Teaching Pediatric Hospital : (Pediatrics)
- Sulaimani Teaching Maternity Hospital : (Gynaecology and obstetrics)
- Sulaimani Teaching Causality Hospital : (Accident / emergency and traumatology)

2. Total number of beds in all five hospitals : (1151) beds .

3. Facilities of Radiology, sonography , mammography , CT scan , laparoscopic surgery , laboratories , histopathology , renal dialysis , upper and lower GI endoscopy facilities .

4. Rehabilitation and physiotherapy centre : provided with necessary equipments , artificial limbs and EMG

5. Polyclinic out patient : run by college consultants .

6. TB centre :

7. Respiratory laboratory: Under 986 UN resolution of oil for food program: all the instruments have arrived and the laboratory is going to be established.

Academic and clinical teaching staff with their qualifications for academic year 2000 - 2001

College teaching staff :

- Dr . Ali Saeed MOHAMMAD , MRCP (UK.) Consultant Physician Dean
 Dr . Faraedon M:A. KAFTAN , DVD (London) Consultant Dermatologist Vice Dean
 Dr . Jamal A . RASHID , D.Ch.(London), MRCP(UK) Consultant Pediatrics Head of Dept.
 Dr . Foud A . BABAN , FRCP , MRCP (London) Consultant Physician Head of Dept.
 Dr . Tahir A . HAWRAMY , CABS (Baghdad) Consultant Surgeon Head of Dept.
 Dr . Talar A . AHMED , CABOG (Baghdad) Consultant Gynecologist Head of Dept.
 Dr . Nawzad ATTAR , FRCS (London) Consultant Surgeon Dept . of Surgery
 Dr . Samar ALMALAIKA , FRCOG (London) Consultant Gynaecologist Dept. Gynaecology & Obstetrics
 Dr . Jamal S. ABDULRAHMAN, DTH & M, MRCP (Ireland) (London) Consultant Physician Dept. Medicine
 Dr . Omed H.K. ABDULWAHAB , FICMS (Baghdad) Consultant Physician Head of Dept.
 Dr . Nasreen A . ALWAFY , M.Sc. (Manchester) Physiology Head of Dept.
 Dr . Sherko A . OMER , M.Sc. (Baghdad) Microbiology Head of Dept.
 Dr . Faruq H . FARAJ , FRCS (London) Consultant Surgeon(Anatomy & Histology) Head of Dept.
 Dr . Nizar M.M. AMIN , DPM (London), MRCPsych (London) Consultant Psychiatrist Dept . of Medicine
 Dr . Ali J . ALRUBAYEE , DPM (UK) Consultant Psychiatrist Dept. of Medicine
 Dr . Raouf R. MERZ , DMRCh (London), M.Phil (UK) Consultant Rhuomatologist , Dept . of Medicine
 Dr . Abdulla . Sh. ABDULLA, DIM (Baghdad), FICMS (Baghdad) Consultant Physician Dept. of Medicine
 Dr . Muhammad A . MUHAMAD , CABM (Baghdad) Consultant Physician Dept . of Medicine
 Dr . Muhammad O. MUHAMA , DIM (Baghdad), FICMS (Baghdad) Consultant Physician Dept. of Medicine
 Dr . Taha . O. ASSED , FICMS (Baghdad) Consultant Physician Dept . of Medicine
 Dr . Amang . A . JALAL , FICMS (Mustansiria) Consultant Physician Dept . of Medicine
 Dr . Rasul M . HASSAN , CABM (Baghdad) Consultant Physician Dept . of Medicine
 Dr . Baxyar M . MAHAMUD , Ph.D. (London) Consultant Physician Dept . of Medicine
 Dr . Abubakir O.M. NADIR , High Diploma (Cardiff , UK) Consultant Chest Physician Dept . of Medicine
 Dr . Aras A . ABDULLA , CABM (Baghdad) Consultant Physician Dept . of Medicine

Dr. Zhyan S. RAMZY, M.Sc. (Baghdad) Community Medicine Dept . Head
 Dr. Mustafa K. AHMAD, M.Sc. (Alexandria. Egypt) Consultant Pediatrician Dept . Pediatrics
 Dr. Adiba I. ALI, High Diploma (Baghdad) Consultant Pediatrician Dept . Pediatrics
 Dr. Hiwa O. AHMAD, CABS (Mosul) Consultant Surgeon Dept . of Surgery
 Dr. Ismaeel . H . A . AGHA, CABS (Baghdad) Consultant Urologist Dept . Surgery
 Dr. Sirwan H. SHARIF, CABS (Baghdad) Consultant Urologist Dept . Surgery
 Dr. Aso O. RASHED, CABS (Baghdad) Consultant Urologist Dept . Surgery
 Dr. Nizar M. TAWFIQ, CABS (Baghdad) Consultant Surgeon Dept . Surgery
 Dr. Lameea. M. TAWFQ, DLO (Baghdad), FICMS (Baghdad) Consultant Otolaryngologist Dept . Surgery
 Dr. Sherko S. ZIMNAKO, M.Sc. (Salahaddin) Consultant Otolaryngologist Dept . Surgery
 Dr. Behjat – AL GANABY, Ph.D (London), Ph.D (Germany) Parasitology, Dept. Microbiology
 Dr. Kamal A. SAEED, CABS (Baghdad) Consultant Surgeon Dept . Surgery
 Dr. Nasreen M. TAHIR, M.Sc. (Mosul) Radiologist Dept . Surgery
 Dr. Amir A.M.ALI, M.Sc. (Baghdad) Radiologist Dept . Surgery
 Dr. Baxtyar M. RASUL, High Diploma (Baghdad) Consultant Orthopedician Dept . Surgery
 Dr. Aree R. ZANGANA, CABS (Baghdad) Consultant plastic Surgery Dept . Surgery
 Dr. Zahir H. BRAKHUALL, CABS (Baghdad) Consultant Urologist Dept . Surgery
 Dr. Huma F. ASEED, High Diploma (Baghdad) Consultant Ophthalmologist Dept . Surgery
 Dr. Omer A. RAFIQ, CABS (Baghdad) Consultant Orthopedic Dept . Surgery

Part time teaching staff from ministry of health for practical teaching in sessions the laboratories and clinical teaching in the hospitals :

Dr. Tirifa Sh. GHAFUR, M.Sc. (Baghdad) Pathology Dept . Pathology
 Dr. Diler N. RASHID, High Diploma (Dublin) Consultant Gynecologist Dept . Gynaecology
 Dr. Runak I. MUHIDDIN, High Diploma (Baghdad) Consultant Gynecologist Dept. Gynaecology
 Dr. Zhyan A. ABDULLA, High Diploma (Baghdad) Consultant Gynecologist Dept. Gynaecology
 Dr. Parween Kh. KHOSHNAW, High Diploma (Baghdad) Consultant Gynecologist Dept. Gynaecology
 Dr. Ikhias N. JWAMER, High Diploma (Baghdad) Consultant Pediatrician Dept. Pediatrics
 Dr. Sirwa A. AHMAD, High Diploma (Baghdad) Consultant Pediatrician Dept . Pediatrics
 Dr. Muhamad N. RASHED, High Diploma (Baghdad) Consultant Surgeon Dept . Surgery
 Dr. Ata F. ABDULLA, High Diploma (Baghdad) Consultant Anesthetist Dept . Surgery
 Dr. Abdulrahman M. RASULL, High Diploma (Baghdad) Consultant Ophthalmologist Dept . Surgery
 Dr. Latif A. MAHMUD, M.B.Ch.B. (Mosul) Pathology Lab. Dept . Pathology
 Dr. Jamal O. TAWFIQ M.B.Ch.B. (Mosul) Psychiatry Dept . Psychiatry

System of Examinations conducted throughout the course

There are :

- A. Mid – year examination in January which includes : theoretical , clinical and practical examinations ; (30% of total marks is allocated)
- B. Final examination in June includes : theoretical , clinical and practical examinations ; (60% of total marks is allocated)
- C. Frequent QUIZ examinations in both first and second trimesters : (10% of total marks is allocated)
- D. The above examination system conducted for first five years
- E. In the final sixth year :

The students will be examined in

1. General Medicine and medical subspecialities of Psychiatry and Dermatology
2. General Surgery and Surgical subspecialities of Ophthalmology , ENT , Anesthesia and Radiology
3. Gynecology and Obstetrics
4. Pediatrics

The examinations include :

1. Theoretical examination (MCQ , gray cases , Data interpretation) : (30% of total marks)
2. Oral examination : (20% of total marks)
3. Clinical examination includes : Long cases , short cases :

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(30% of total marks)

4. Clinical assessment during Hospital clinical training :
(20% of total marks)

Number of Students :

An average of 92 (ninety two) graduate students are enrolled annually since academic year 1992 – 1993

1992-1993	102 students
1993-1994	109 students
1994-1995	92 students
1995-1996	87 students
1996-1997	93 students
1997-1998	97 students
1998-1999	74 students
1999-2000	89 students
2000-2001	87 students

Number of students graduated from the college of Medicine :

1997 – 1998 :	86 students (males : 60 and Females : 26)
1998 – 1999 :	61 students (males : 46 and Females : 15)
1999 – 2000 :	70 students (males : 48 and Females : 22)

Number of post graduated students at 2000 : They were six : two in surgery , two in Medicine and two in Pediatrics .

Number of postgraduate students accepted at academic year at 2001 are 18 students , Surgery : 5 students , Pediatrics : 4 students, Community Medicine 4 students, Urology : 2 students , ENT : 1 student, Orthopedics and Fracture : 1 student, Pharmacology : 1 student

University of Dohuk

The College of Medicine has the following objectives:

- 1- *To meet the need of Kurdistan for doctors with necessary clinical skills and continues training to provide good health care to the people.*
- 2- *To conduct post-graduate studies in different branches of clinical and basic medical sciences, assisted by advisers and supervisors from other universities in Kurdistan and worldwide.*
- 3- *To engage the students and the staff in different programs to act and interact in their community for promoting health standards.*

The College of Medicine at the University of Duhok, at the moment, has the following clinical and basic Departments located at campus or based at Azadi General Hospital. In addition to these departments, the College encompasses the School of Nursing & Midwifery. The College also is affiliated to a number of other Institutes and Centers both internal and external to the University and there are close links with other Universities and external Consultants worldwide also has links with WHO & UNESCO.

Basic Science Departments:

- Department of Chemistry & Biochemistry.
- Department of Anatomy & Microanatomy.
- Department of Physiology & pharmacology.
- Department of Pathology.
- Department of Microbiology.
- Department of computer and Medical Physic.

Clinical Departments:

- Department of surgery
 - i- To teach medical students.
 - ii- To run the different surgical departments of Azadi teaching hospital and A&E hospital, general surgery, trauma, urology, ear, nose & throat, vascular & plastic surgery.
 - iii- To supervise postgraduate studies in this branch.
- Department of Medicine:
 - This department currently has seven Consultant Physicians to provide wide range of specialist activities. Physicians are also responsible for the inpatient wards and outpatient departments, assisted by well-trained junior staff, supported by laboratory & Radiological department including CT scan & MRI. The Department conduct ECG exercise testing, Echo & Doppler Echocardiography, Endoscopy & Bronchoscopy. It also has Pharmacy and Nursing Services. The Specialist Physicians teaches and train medical students at different levels and supervises postgraduate students.

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- As a part of department, the Community Medicine Section performs teaching responsibilities in addition to epidemiological & statistical consultations for research projects of the staff of other departments, also at the undergraduate level the section is involved in planning & conducting urban and rural health care studies.

- Department of Obstetrics & Gynecology:

- The main objectives for this Department are to serve women, look after their wellbeing, and to decrease maternal & infant mortality & morbidity. Teaching students starts at the fourth year and continues for three years. There are 5 Consultant Gynecologists who are responsible for teaching, training students and also running the Department of Gynecology at Azadi General Hospital where they are responsible for various wards, which offer services like delivery ward, antenatal & postnatal clinics, and family planning clinic and infertility clinic.

- Department of Pediatrics:

- The Department has six Consultant Pediatricians, they teach medical students for the last three years of the study; they also supervise postgraduate students.