## Description of Surveillance System of Sexually Transmitted Diseases , Human Immunodefiency Virus and Acquired Immunodefiency Syndrome in Iraq

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## الخلاصة

أجريت الدراسة الوصفية التي تستخدم تقنية التقويم في بعض المؤسسات الصحية ذات العلاقة بالأمراض المنقولة جنسياً، الإصابة بفايروس العوز المناعي البشري ومتلازمة العوز المناعي المكتسب وبالذات مركز دراسات وبحوث المتلازمة في بغداد وعدداً من شعب المتلازمة في دوائر صحة المحافظات خلال الفترة من ١٥ أيار ٢٠٠٣ ولغاية ٣٠ أيلول ٢٠٠٣ (لوصف نظام الرصد للفترة من ١٩٩٣ لغاية نهاية ٢٠٠٢). تهدف الدراسة إلى وصف نظام الرصد لهذه الأمراض في العراق. تم تبني وتطور استمارة الاستبيان لتقويم النظام لغرض الدراسة، وتم التأكد من صدق محتوى الاستمارة من خلال عرضها على (١٢) خبيراً، كما تم اعتماد طريقة الثبات باستخدام باحثين(الباحث الثاني من حملة شهادة الدكتوراه في التمريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم اعتماد طريقة الثبات باستخدام والتي كانت (الباحث الثاني من حملة شهادة الدكتوراه في التمريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا والتي كانت (الباحث الثاني من حملة شهادة الدكتوراه في التمريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا العرين (الباحث الثاني من حملة شهادة الدكتوراه في التمريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا والتي كانت (الباحث الثاني من حملة شهادة الدكتوراه في التمريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا والتي كانت (الباحل الثاني من حملة شهادة الدكتوراه المريض ) للتأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا والتي كانت (الباحل الثاني من حملة شهادة الدكتوراه المريض ) التأكد من ثبات الاستمارة الاستبيانية حيث تم احتساب قيمة كرون باخ-الفا والتي كانت (الباحل الثلي الرابي الموقية المتوفرة في المؤسسات الصحية ذات والتي كانت (الباحل الثلما الرصد، وثانيها من خلال المواتين المائرة مع عدد من العاملين في النظام، وتم تحليل المعلومات المولية المتوذ وي التيل المعلومات الصحية المالي المولي المولي المولي المولي الم ولي المولي الموليات

أظهرت الدراسة بأن فعاليات النظام تغطي كافة محافظات القطر من خلال مؤسساته الصحية المنتشرة، ويقوم النظام بضبط، السيطرة، ومنع انتقال السفلس، فايروس العوز المناعي البشري، ومتلازمة العوز المناعي المكتسب بسبب تأثيراتها المروّعة على المريض والمجتمع، كذلك نجح النظام في تحديد وتغطية مجاميع الاختطار، تعتبر الاجراءات الوطنية والدولية في الابلاغ عن اصابة جديدة بفايروس العوز المناعي البشري سريعة في السيطرة على الاصابة وحماية المجتمع منها ، تعتبر اجراءات السيطرة في منا المناغ عن اصابة بديدة هذه الأمراض كما تم تحديد ثلاث مستويات لتنفيذ فعاليات النظام على مستوى القطر وتم اعتماد جدول زمني في ارسال المعلومات بينها ، وإن التغذية الرجعية، كانت من خلال الدورات للعاملين في النظام وللمجتمع، وكذلك من خلال الزيارات الميدانية لمواقع الرصد.

استنتجت الدراسة إلى ان اخضاع هذه الامراض لنظام الرصد يعتبر اجراءاً سليماً ، كذلك فأنّ النظام نجح في تغطية مجاميع الأختطار وأكتشاف الحالات الموجبة للأصابة وتقليل انتشار الأصابات .

نوصي الدراسة بضرورة اعتماد طرق الاتصال التقنية الحديثة في ارسال المعلومات ، وفي النهاية تقترح الدراسة ادخال موضوع الرصد في مناهج تمريض صحة المجتمع للدراسات الأولية والعليا.

## Abstract

A descriptive study using evaluation technique was carried at the health organizations concerning STIs/HIV/AIDS, mainly the AIDS Researches and Studies Center in Baghdad and many of the AIDS sections in the Health Directorates in the Governorates throughout the period of May  $15^{\rm th}$ , 2003 through September  $30^{\rm th}$ , 2003( to describe the surveillance system for the period 1993 through 2002).

The study aimed to describe the STIs/HIV/AIDS surveillance system in Iraq. System evaluation questionnaire was adopted from WHO and developed for the purpose of this study. Content validity of questionnaire was established through a panel of 12 experts. Interobservor reliability method was carried out by two researchers to establish the reliability of the instrument and Cronbach's alpha coefficient was computed for such reliability as (0.93). Data were collected through two ways, firstly from the documented information which was available in the health organizations concerning STIs/HIV/AIDS surveillance activities and secondly from the direct interview that was carried out with the health workers

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who are involved in the surveillance system. The data were analyzed through the application of descriptive statistical analysis (frequency and percentage).

The study reveals that the activities of the surveillance system are covering all over the country through its distributed health facilities. The surveillance system is focusing on capture, control and prevent transmission of Syphilis, HIV and AIDS as a health events of devastating consequences on the patient and community. Also it succeeds in identification and coverage of the risk groups. National regulation notification of new HIV<sup>+ve</sup> case is very rapid to control the case and to protect the community. Control measures are so effective in preventing the transmission of these diseases. Three levels (Peripheral , Intermediate and Central) are identified to conduct the surveillance activities all over the country, through which special schedule of time is depending in reporting the information . Feedback among these levels is taking the forms of sessions, seminars for the staff involved in the surveillance, the community and field visits to the sentinel sites.

The study recommended that high technical communication means may be depended in reporting . Lastly, surveillance is to be included as a subject in the curriculum of the Community Health Nursing as well as for Community Medicine for undergraduate and post-graduate students.

## Introduction

Sexually transmitted infections (STIs) constitute a public health problem of major significance especially in developing countries, their incidences has been increased during the last few decades <sup>(1)</sup>. Such infections rank among the top five diseases for which adults seek health care, and are the second most important causes for the overall disease burden in young adult women <sup>(4)</sup>.

Surveillance considers a fundamental component of the strategy against emergence of infection <sup>(10)</sup>.

Epidemiological information collected from STIs Surveillance enables national STIs/HIV/AIDS program managers to conduct efficient planning, monitoring and evaluation of intervention activities for STIs including HIV. The evidence-based information on transmission patterns of STIs and potential impact of planned intervention activities is required to make appropriate political and programmatic decisions at local as well as international level. Therefore, a quality STIs Surveillance system is an essential element of HIV/AIDS and STIs program<sup>(11)</sup>.

Iraq is one of the first countries worldwide that responded efficiently to the importance and severity of the STIs including HIV/AIDS. A national surveillance system of STIs/HIV/AIDS introduced since 1987 aimed to put a plan to control / prevent the disease in the country with the assistance of WHO. The study aims to describe the surveillance system.

## Methodology

A descriptive evaluation design was carried out throughout the present study for the period from 15<sup>th</sup> May to 30<sup>th</sup> September 2003 in order to describe the Status & Process of the surveillance system of STIs/HIV/AIDS for the period 1993 through 2002 in Iraq.The study was conducted in:

- 1. AIDS Researches and Studies Center (which is located in the Center for Communicable Diseases and Injury Prevention / Ministry of Health / Baghdad).
- 2. AIDS control sections in the Health Directorates in the governorates .
- 3. Field visits to Ibn Zuhr hospital & the AIDS wards in the governorates (Baghdad, Tikrit, Kirkuk & Mosul).

Data of the study were gathered by an evaluation tool which was developed depending on the protocol for evaluation of epidemiological surveillance system (WHO, 1997) with some modification to adopt with local situation. The instrument deals with

the surveillance on the basis of its structure and process through the use of: Documented information references of the AIDS Researches and Studies Center, Reports submitted to the AIDS Researches and Studies Center from the Health Directorates in the governorates and direct interviews with (18) subjects who are responsible to carry out the surveillance activities in the AIDS Researches and Studies Center and in the AIDS sections in the Health Directorates in the governorates.

A pilot study was conducted prior to data collection during the first and second weeks of May 2003. Before that, the investigators exposed the instrument to 12 experts for their review. Their responses indicated that the content was clear and comprehensive and can adequately measure the phenomena underlying the study. Also a purposive sample of (10) subjects involved in the surveillance system was interviewed on individual basis. Interobservor reliability technique was employed for the determination of the instrument reliability. Cronbach alpha correlation coefficient was computed for such determination ( $\propto = 0.93$ ).

The data were analyzed through descriptive statistical measurements (Frequency and Percentage).

## Results

This chapter presents the results of the study. They are organized in two main parts as follows:

Health Facility	Number
Specialized center	1
Specialized Hospital	1
Reference Laboratory	1
Specialized Ward	14
Specialized Section	16
Therapeutic and Counseling Center	17
Sexually Transmitted Diseases Unit	101

#### **Part I: Description of The structure of the surveillance system:**

The table presents the categorization of the health facilities as they are related to the Surveillance System. There is one specialized center called AIDS Researches and Studies Center and it is accounted as the main one of the Surveillance System . Ibn-Zuhr is the only specialized hospital in Baghdad, and (14) special wards outside Baghdad which are distributed as one ward in each governorate all over the country for in-patient with AIDS.

One reference laboratory which is located in Baghdad to ascertain or confirm the incidence of infection through investigation of the blood samples sent from all over the country, is called "AIDS Reference Laboratory".

Sixteen specialized section which are named "AIDS sections" are distributed in Baghdad and other governorates all over the country. They are articulated to the department of primary health care in the Health Directorate of the governorates. Also there is seventeen specialized health centers; three in Baghdad and fourteen in the other governorates to provide therapeutic and counselling services to the HIV patients and their contact or relative individuals. More than one hundred (101) small sections in the primary health care centers which are distributed on (71) health sectors for STIs Surveillance all over the country.

Table (2): Manpower o	f the S	Surveillance	System
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Staff Number		%
Physician	140	22.51

Dentist	1	0.16
Pharmacist	15	2.41
Nurse	27	4.34
Health staff (Medical & Precautionary assistant)	127	20.42
Laboratory technician	131	21.06
Administrative staff	80	12.86
Service staff	85	13.67
Statistician	10	1.6
Health researcher	6	0.96
Total	622	100

The table presents that the majority (two third) of the manpower of the Surveillance System are the physician (22.5%), Laboratory technicians (21.06%), and the health staff (Medical assistant and Precautionary assistant) as (20.42%), and almost one quarter of the manpower are the service staff as (13.67%), administrative staff as (12.86%), while the other manpower subjects are less than (10%) of the total manpower (9.47%) [Nurses as (4.34%), Pharmacists as (2.41%), Statisticians as (1.6%), Health researchers as (0.96%), and Dentists as (0.16%)].

#### Part II: Description of the process of surveillance system: Table (3): The Events under Surveillance

Tuble (5). The Events under Survemance					
Event	Frequency	%			
Syphilis	13	72.2			
HIV	14	77.7			
AIDS	8	44.4			

From the table it is clear that HIV is the main event under Surveillance as (77.7%), followed by Syphilis as (72.2%) and eventually AIDS as (44.4%).

Risk groups	Frequency	%
STIs patients	13	72.2
Persons arrested due to sexual contact	7	38.8
Common prisoners	3	16.6
Prostitutes	8	44.4
Hotel and Restaurant workers	6	33.3
TB patients	8	44.4
Pregnant women	2	11.1
Hepatitis B and C patients	11	61.1
Hemophilic patients	17	94.4
Artificial kidney's patients	15	83.3
Thalassemic patients	17	94.4
Patient's spouse	12	66.6
Children of infected women	11	61.1
Persons contact with the patients	12	66.6
Desirous persons	4	22.2
Blood donors	18	100
Premarital persons	5	27.7
Comers	17	94.4
Health workers	7	38.8
Transportation workers outside the country	4	22.2

Table 4. Risk groups which require Surveillance coverage

The table presents the seriousness of the population groups which require surveillance coverage, high percentages for some groups are; Blood donors as (100%), Thalassemic, hemophilic patients and comers as (94.4%) for each of them, Artificial kidney's patients as (83.3%), STIs patients as (72.2%), Patient's spouses and Persons contact with the patient as (66.6%) for each of them, and Hepatitis B and C patients as (61.1%), while lower percentages for the other groups are: Prostitutes and TB patients as (44.4%) for each of them, persons arrested due to sexual contacts and Health workers as (38.8 %) for each of them, Hotel and Restaurant workers as (33.3%), Premarital checks as (27.7%), Desirous persons as (22.2%), Common prisoners as (16.6%) and Pregnant women as (11.1%).

Regulations	Interval
1.Re-check the blood sample in the sentinel site	Within 24-48 hours (first-second day)
2.Send the blood sample to the AIDS Reference laboratory for re-checking	Within 48 hours after (third-fourth day)
3.In case of foreign infected person, he/she may be left the country	As soon as he/she is going to take the passport from the AIDS Center
4.In case of Iraqi infected person, isolate the patient in the AIDS ward, or Ibn-Zuhr hospital	As soon as he/she is going to take the passport from the AIDS Center
5.Consultation about the case may be imposed	During quarantine
6.In case of discharge the patient from the hospital, he/she checks monthly at the therapeutic and counselling center	After cessation of quarantine, as follow-up

Table (5): National regulation regarding notification of new HIV<sup>+ve</sup> case

The table presents that capture new HIV<sup>+ve</sup> case can be as soon as possible .Then the case can be kept under quarantine for consultation, and later care and support

addition to follow-up, or to deportation of the infected case outside the country as soon as possible.

Table (0): Control Measures over III (7AID5					
Measures	Frequency	%			
Continuous surveillance	8	44.4			
Quarantine and treating the case	18	100			
Prevention measurement for the persons contact with the patient	18	100			
Health education	14	77.7			

 Table (6): Control Measures over HIV/AIDS

The table presents the control measures over HIV/AIDS. It indicates that the most appropriate measures are quarantine and treating the infected person, and prevention measurement for the person contact with the patient at (100%) for each of them. Also health education for the patient and community constitute for (77.7%) of the control measures, while the lower percentage of the control measures (44.4%) is for continuous surveillance.

Staff	Number of Forms	%
Physician	107	28.46
Precautionary Assistant	69	18.35
Medical Assistant	56	14.89
Bacteriologist	46	12.24
Biochemist	14	3.72
Laboratory Assistant	10	2.66
Statistician	2	0.53
Unknown	72	19.15
Total	376	100

 Table (7): Coordinator of the Monthly AIDS Surveillance Form Arrangement

The table presents all the available AIDS surveillance forms submitted to the AIDS Researches and Studies Center from the sentinel sites (376 forms). Also the table presents that more than quarter of the forms (28.46%) had been coordinated by the physicians, while (0.53%) of the forms had been coordinated by the statistician.

**<u>Note</u>:** The forms that are used for recording the occurrence of new cases of HIV<sup>+ve</sup> are signed by the Chairman of AIDS Department in the governorate exclusively, who is specialist in community medicine.

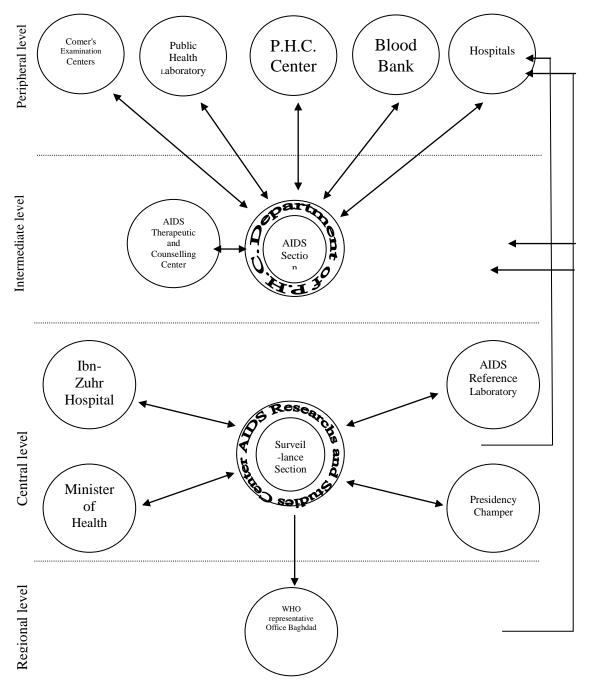


Figure: Flow chart of information

This figure demonstrates that there are four levels which deal with the informations about STIs/HIV/AIDS: First: The peripheral level which is constituted from many sites (Commer's

**First:** The peripheral level which is constituted from many sites (Commer's Examination Centers, Public Health Laboratory, P.H.C. centers, Blood Bank and Hospitals).

**Second:** The Intermediate level represented in AIDS section articulated in the Department of P.H.C. At this level there is also an AIDS Therapeutic and Counselling Center subordinate to the AIDS section.

**Third:** The central level represented in the surveillance section articulated in AIDS Researches and Studies Center, in addition to two health facilities subordinate to AIDS Researches and Studies Center (Ibn-Zuhr Hospital and the AIDS Reference Laboratory). Also there are two high authority offices at this level (Presidency Champer and Minister of Health).

**Fourth:** The regional level represented in the World Health Organization Representative's Office/Baghdad.

Table (o): Thing of Reporting Commun	cation between Levels
Level	Time period
From AIDS section in the Governorates to the AIDS Researches and Studies Center	Monthly
From the AIDS Researches and Studies Center to the AIDS National Committee, then to the Presidency Champer.	Every 2-3 months
From the AIDS Researches and Studies Center to the W.H.O.	Quarterly/Year

 Table (8): Timing of Reporting Communication between Levels

The table presents that the reports are submitted from the AIDS section in the governorates to the AIDS Researches and Studies Center monthly. Then after completion of their collections they presented to the National Committee, and to the Presidency Champer every two-three months. Another channel of reporting exists, from the AIDS Researches and Studies Center to the WHO representative's Office in Baghdad quarterly/year.

# Table (9): Activities of Surveillance System "Sessions, Seminars and FieldVisitsto the Sentinel Sites"

Sessions and Seminars					
Year	Medical staff	Health staff	Other Community Categories	Field visit to The Sentinel Sites	
1999	119	164	122	501	
2000	85	107	92	240	
2001	70	115	74	663	
2002	94	83	85	686	

The table presents the activities of the surveillance system (Sessions, Seminars, and Field visits to the sentinel sites) as feedback. It is obvious that in 1999, the sessions and seminars had been accomplished more than in other years, while the field visits to the sentinel sites had been accomplished more in the years 2002, 2001 than in other years.

Y	Year		Centers reporting		Reports submitted within the mandatory reporting date		lbmitting porting
		Number	%	Number	%	Number	%
STIs							
	1999	147	76.5	29	19.7	89	60.5
	2000	192	100	6	3.1	87	45.3
	2001	192	100	20	10.4	101	52.6
	2002	190	98.9	8	4.2	118	62.1
HIV							
	1997	192	100	37	19.2	189	98.4
	1998	192	100	41	21.3	190	98.9
	1999	192	100	29	15.1	190	98.9
	2000	192	100	6	3.1	191	99.4
	2001	192	100	20	10.4	189	98.9
	2002	192	100	8	4.1	188	97.7

 Table (10): Definition of the quality of reporting

This table presents the definition of the quality of reporting that all the STI sentinel sites had been submitted their reports during the years 2000, 2001. While all the

HIV sentinel sites had submitted their reports during the years 1997-2002. It is also obvious that the highest percentage (19.7%) of STI reports was submitted within the mandatory reporting time which was during the year (1999), and the lowest percentage (3.1%) of the STI reports which was submitted within the mandatory reporting time was during the year (2000). The highest percentage (21.3%) of HIV reports was submitted within the mandatory reporting time during the year (1998), while the lowest percentage (3.1%) of HIV reports was submitted within the mandatory reporting time during the year (1998), while the lowest percentage (3.1%) of HIV reports was submitted within the mandatory reporting time during the year (2000). Finally (62.1%) of STI reports was submitted zero reporting during the year (2002) which accounted for the highest percentages, while the lowest percentage of STI zero reporting is (45.3%) which was during the year (2000). (99.4%) of HIV zero reporting which was the highest percentage during the year (2000), while the lowest percentage (97.7%) of HIV zero reporting was during the year (2002).

## Discussion

UNAIDS (2000) stated that where the Ministry of Health has an effective information system, HIV/AIDS/STIs and the response to them can be monitored along with other diseases by a central epidemiological unit, also where the AIDS programs is steered by an inter-ministerial committee, the responsibility for co-ordination of monitoring and evaluation activities may be located outside the Ministry of Health, although this tends to make monitoring and evaluation more complicated. This co-ordination role of the national AIDS programmes or its affiliates is well planned and carried out in the Iraqi surveillance system.

The manpower of Iraqi surveillance system can be categorized into: Medical staff, Health staff, Health auxiliary staff (Laboratory technician, Medical assistant and Precautionary assistant), Administrative staff and Services staff.

Any classification of the scientific or professional degrees or certificates of the manpower of Iraqi surveillance system is not documented except two declarations for organizational and planning services, one of them for appointing a specialist in community medicine as a Chairman of the AIDS section in each health directorate of the governorates, the other categorizes the manpower of the AIDS researches and Studies Center according to their specialty, scientific degrees and responsibilities.

Iraqi regulations place these health events (Syphilis, HIV/AIDS) under surveillance because they compromise the health of the infected individuals. Therefore HIV/AIDS surveillance has been conducted since 1987 and STIs (Syphilis) surveillance since 1999.

Chin reported that in areas where STIs/ HIV infection is believed to be very low, priority for public health surveillance should be given to those persons or population groups with the highest risk behaviors(3).

Many reports agreed with present study who indicated that the risk groups are at many levels of (6,12,8,7).

- A. High risk groups as : STIs patients, Sexual intercourse with multiple and varying partners, Female prostitutes, Frequent travelers, IDUs, Blood recipient, Hemophilia and ANC attendees.
- B. Groups at varying levels of risk as : Pregnant women , Hospital patient attendees (In-and-outpatient) , Work place based groups , Military personnel and TB patients
- C. Groups at low risk as : Voluntary blood donors , and Health workers.

STIs/HIV/AIDS surveillance system in Iraq depends on a forms of risk groups (Appendix 1 & 2), accordingly many obligations were decided and taken place as investigation of : all blood donated , blood of all commers entering the country , all STIs

ptients seeking medical care and treatment in the general hospitals and clinics , all patients spouses , health workers and persons contact with the patient every three months , patients of diseases of dual or co-infection with HIV as Hepatitis B&C and T.B. , all prostitutes and persons arrested due to sexual contact , all hotel and restaurant workers , all premarital persons, all desirous persons and common prisoners and pregnant women.

The predominant activity of the surveillance system when detecting any new HIV<sup>+ve</sup> case, he/she is isolated in the special AIDS ward or in Ibn-Zuhr Hospital, at which care and support is given, but at the mid of 9<sup>th</sup> decade of the last century the quarantine of HIV had been invalidated . UNAIDS<sup>(5)</sup> stated that in medical practice, a patient is isolated when he/she has a contagious disease that is transmittable by air, such as TB in its infectious stage, or touch. This is not applicable to HIV/AIDS, because it does not transmit from one person to another through causal contact or day-to-day activities. Isolation or limitations on the movement of people living with HIV/AIDS is a violation of their rights. Prevention measurement for the persons contact with the patient (wives,) in addition to the health workers who is in contact with the patient is another control measure . Health education is also considered another control measure . The surveillance system conducted many sessions and seminars for community categories. Much of the efforts toward this end has focused on educating both the general public and specific high risk groups, also to STIs counselling and services to sex workers and their clients, with efforts directed to promote behaviour change and prevent further STIs transmission. One of the cornerstone of STIs control is adequate management of patients with symptomatic STIs. This includes diagnosis, treatment and individual health education and counselling on disease prevention and partner notification. WHO <sup>(10)</sup> indicated that in developing countries, the number of AIDS cases is increasing because of lack of effective preventive measures. Continuous surveillance is another control measure . Surveillance system for HIV/AIDS has been carried out since 1987 and for STIs since 1999 till now. In the absence of effective therapy for STIs especially HIV, continuous surveillance data have reliably detected changing patterns of transmission and reflected the effect of prevention programmes on the incidence of STIs/HIV and related illnesses in specific population  $^{(2)}$ .

The monthly Syphilis , HIV/AIDS surveillance forms are forms documented by the surveillance system in Iraq (Appendix 1 & 2) and are applicable to and used in the all sentinel sites of the system all over the country. The activity needed to fulfill these forms is only tabulation the numbers of people tested according to their risk groups and also tabulation of the Syphilis , HIV<sup>+ve</sup> cases according to the risk group detected from, finally, summation of the total numbers, this activity may be carried out monthly and reported to the AIDS Researches and Studies Center. So, this activity can be carried out by any one of the manpowers, especially the statistician, if present, because it is a statistical activity and used for statistical benefits. Evaluation form for HIV<sup>+ve</sup> new cases is another form documented by the surveillance system (Appendix-3). When detecting new HIV<sup>+ve</sup> case, he/she should be isolates in the special ward for AIDS or in Ibn-Zuhr Hospital, and interviewed by the specialist physician to take the important information according to this form. These evaluation forms were filled exclusively by the specialized physician who interviewed the patient

According to the Iraqi surveillance system three functional levels through which various activities are usually carried out in addition to the WHO Representativeness Office in Baghdad : **Peripheral level** which is the first point of contact of an ill person with the health serivces. The patient is usually seen by a primary care physician, clinical officer or nurse. It is normally at this level that the first opportunity for epidemiological

surveillance occurs, The tasks carried out are diagnosis and case management and reporting of cases. Intermediate level ; whose main function from the perspective of communicable disease surveillance and control is ongoing analysis of data from the periphery in order to recognize outbreaks or changes in disease trends. These analysis must be associated with responses such as investigation and intervention. Central level; at the national level where policies on infectious disease are set and where resource allocation must often occurs. The central level plays a key role in supporting the intermediate levels, by providing services that are not available elsewhere, such as high level epidemiological skills or laboratory facilities. The central level must also be able to deal with the outbreaks of national importance in a coordinated fashion. In addition, overall disease trends can be analysed and resources for disease control targeted to highrisk areas. The central level must liaise with other countries and international agencies in the response to the outbreaks of international significance and in the management of diseases subject to the international health regulations, or to agreed targets for control or elimination. The central level may have access to alternative data sources such as national reference laboratories where the identification of unusual organisms should trigger a response.

Data which are collected all over the country report from the AIDs sections in the governorates to the AIDS Researches and Studies Center each month (before the 10<sup>th</sup> day of the following month) and after completion of reports collection, they are presented in the AIDs National Committee meeting every 2-3 months, then to the Presidency Champer. Finally, the results are reported to the WHO quarterly/year.

Analysis of data regarding activities of STIs surveillance system reveales that the sessions and seminars carried out at 1999 were more than those carried out in the later years .This can exist because the STIs surveillance system started in 1999 which needed more concern and later it took a routine activity of less concern, while field visits to the sentinel sites are increasing gradually through the later years, perhaps to follow up conducting the surveillance activities. Three sessions annually, of not less than 30 participants from the health workers of the surveillance system, concerning STIs/HIV/AIDS were carried out. Through these sessions, seminars and field visits, feedback of information, decision taken and instructions are disseminated to the various levels of the system and their health manpower . WHO <sup>(7)</sup> stated that results should be disseminated as quickly as possible to health officials responsible for formulating policy and to health care providers at the sentinel sites. The audience must be defined and the means of channel of communication selected. According to the Iraqi Surveillance System, the means of channel of communication selected is the formal meeting (sessions and seminars) in addition to the field visits.

According to the Iraqi surveillance system accuracy in follow up and communication concerning HIV surveillance was more than STIs surveillance, there was fluctuation in reports submitted within the mandatory reporting time ( within the first 10 days of the next month ). The causes of this delay may be perhaps due to delay in collecting information, delay in coordinating reports or because of communication difficulties. Also almost of the HIV reports indicate that HIV<sup>+ve</sup> is narrowly limited, while approximately (40%-50%) of the STIs reports indicate that the STIs are widely spread. These results emerge because HIV is considered a high threatening disease on life, while the complications of the other STIs are less effect, from here, the risk groups under HIV surveillance are much more than those under STIs surveillance in order to capture any new HIV<sup>+ve</sup> case when present, in addition, the HIV<sup>+ve</sup> case may be under legislative commitment to prevent spread of disease through any route of transmission,

while the other STIs patients are free in the community and can transmit the disease to anyone they contact with through the routes of transmission.

## Recommendations

According to the previous conclusions, the study recommends the following:

- 1. Reinforce the health facilities by specialized health manpower who have high scientific degrees, and are provided with high technology oriented instruments .
- 2. Using high technical communication methods, such as Fax, Telephone and E-mail are necessary for rapid reporting and without missing.
- 3. All health care workers, particularly at the peripheral level, should have a thorough understanding of the trends of diseases occurrence and distribution.

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## Appendix-1

استمارة الرصد الوبائي للعوز المناعي

	لسنة		لشهر	
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عدد الحالات المرضية	عدد المفحوصين	مجاميع الفحص
		المصابون بأمراض جنسية
		الموقوفون والمحكومون لأسباب جنسية
		السجناء العاديون
		الغجر في امكان تواجدهم
		العاملون في المنتديات الليلية
		مرضى التدرن
		النساء الحوامل
		المصابون بالتهاب الكبد الفيروسي (ب) و (ج)
		مرضى نزف الدم الوراثي
		مرضى الكلية الصناعية
		مرضى الثلاسيميا
		أزواج المصابين
		أطفال الامهات المصابات
		الملامسون للحالات الموجبة
		فحص المشتبه به
		الدم المتبرع به
		المقبلون على الزواج
		الوافدون
		العاملون الصحيون
		الملامسون للحالات الموجبة
		العاملون في النقل البري والبحري والجوي
		المجموع الكلي

## Appendix-2

دائرة صحة ...... استمارة الرصد الوبائي والنشاطات الشهرية لوحدة الأمراض المنقولة جنسياً لشهر ...... لسنة ......

الرصد الوبائي للتحري عن السفلس

الموجب	VDRL	مجاميع الاخطار
		الموقوفون والسجناء لاسباب جنسية
		المقبلون على الزواج
		الحوامل
		الغجر /خلال حملات نصف سنوية
		العاملون في الفنادق والمطاعم السياحية
		مراجعو العيادات الاستشارية–المصابون بـ (افراز احليلي، افراز مهبلي غير سيلاني،
		تقرحات نتاسلية)
		مراجعو العيادات الشعبية والخاصة
		المجموع الكلي

اِئح التالية بمعدل ندوة أو دورة كل ٣ أشهر	عدد الدورات التدريبية والندوات التثقيفية للشر
	كوادر طبية
	كوادر صحية
	شرائح المجتمع الاخرى

لزيارات الميدانية لمواقع رصد وتسجيل الاصابات والمختبرات بواقع زيارة واحدة لكل مؤسسة خلال ثلاث أشهر (يذكر اسم	عدد ا
سة)	المؤس
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استمارة تقييم الإصابا		Appendix-3 استمارة تقييم الإصابات الجديدة للعوز المناعي اسم المركز العلاجي والارشادي: الحالة الاجتماعية: المهنة:	
طريقة الاصابة بالعدوى: تاريخ كشف الاصابة:			
هل ظهرت اعراض مرضية: في حالة نعم ما هي الاعراض:	نعم 🗆	ע 🗆	
التاريخ المرضي: ١ -الامراض المزمنة:			
٢- العمليات الجراحية: العدد:	نوع العملية:	المكان:	التاريخ:
٣- نقل الدم: عدد الوحدات:	المكان:	التاريخ:	المصدر :
الإجراءات الوقائية (بضمنها فحص الملامسي	ىين)		
رأي الطبيب المعالج:			

رأي اللجنة الفرعية:

رأي لجنة المتلازمة: