

# Leprosy Elimination In Islamic Republic of Iran – 2007

## **Organization of surveillance and control of Leprosy :**

The public Health Care Network in the Islamic Republic of Iran consists of 2224 Urban Health Centers , 2405 Rural Health Center and 16820 Health Houses .

The health care network offers PHC services throughout the country and now PHC services are accessible to 84 % of rural and 66% of urban population .

Case-finding, treatment, training of health staffs and public health education, registration and reporting are main activities of health care network for leprosy elimination program .

## **Statistical data on prevalence and detection :**

### **Background:**

The annual registered number of leprosy cases has progressively declined since 1984 .

This trend has been most noticeable in endemic areas . The consequences of socioeconomic improvement in rural and urban population have been important as well as expanding the usage of multi-drug therapy ( MDT ) and better patient care .

A very slight increase in detection of leprosy has been seen in 1991 which was mainly related to the improvement of surveillance system and then after year 1992 , the detection declined steadily year by year (Table1). But one another increase has occurred in the year 2000 due to doing LEC and some active case-finding activities among the family members of the existent and cured patients .

The cumulative figure reported over the past years was 10487 cases; but as the computerized data collection system established in 1992 , the total number of cases , after deleting the repetitions has become 8567 .

Therefore at that time, considering all of under treatment cases , the disease prevalence rate was 0.4 per 10,000 population ( it is obvious that leprosy was in the elimination phase at the end of 1992 ) .

Since 1991 ( after integration of leprosy program in primary health care system ) the annual detected cases of leprosy have been as follows :

**Table1: Trend of the frequency of detected leprosy cases in IRAN by nationality since 1991**

Year	Detected cases		
	Total	Iranian	Non-Iranian
1991	189	166	23
1992	164	139	25
1993	175	158	17
1994	137	115	22
1995	129	117	12
1996	118	102	16
1997	103	90	13
1998	91	73	18
1999	102	79	23
2000	126	104	22
2001	92	79	13
2002	88	80	8
2003	71	59	12
2004	95	83	12
2005	97	93	4
2006	76	66	10
2007	32	27	5

Since 1993 , 1532 new cases has have been recorded and 1455 old cases who were not previously reported to Disease Control Department ( DCD ) have been added to our registry . So the cumulative frequency of cases reached **11554** at the end of 2007 ; out of them 2167(%19) cases have died so far, and among the remaied 9387 cases , 8914(%77) cases have completed their treatment , 397(%3) cases were defaulters and 76(%1) cases are under treatment .

From these 76 under MDT cases , 65 cases are Iranian . The highest number of these cases belong to East Azarbaijan , Gilan .

### **Current situation :**

The **Prevalence Rate** of disease (at the end of 2007) was **0.01** per 10.000 of population.

But during the year 2007 , only 32 new cases were detected and put under MDT ;

So the **Detection Rate** was **0.04** per 100,000 population in 2007 ;

Those new cases belonged to 22 districts of 12 provinces ;

From those 27 Iranian new cases :

- 52% were from urban area ;
- 56% were female ;
- All of them were above 15 years of old ;
- 41% had grade2 disability ;
- 7% has had a history of close contact to leprosy cases ;
- 22% were Paucibacillary ;

The reported cases of relapses was 2 ( during 2007) .

### **Objectives and targets of the national program(2005-2010) :**

- ↓ Prevalence Rate of Leprosy from 0.02 to 0.01 per 10,000 till the end of 2008
- ↓ Grade2 disability among new leprosy cases from 41 to 20 % till the end of 2008
- ↓ Defaulter rate to less than 1% ( among new cases )
- ↓ Relapses
- Keeping the existent MDT coverage rate ( 100 % )

	<b>Prevalence Rate (10000)</b>	<b>Detection Rate(100000)</b>	<b>G2 Disability(%)</b>	<b>Defaulter Rate(%)</b>	<b>Relapse Rate (no)</b>	<b>MDT Coverage(%)</b>
<b>2000</b>	<b>0.1</b>	<b>0.15</b>	<b>16</b>	<b>0</b>	<b>18</b>	<b>100</b>
<b>2001</b>	<b>0.06</b>	<b>0.12</b>	<b>32</b>	<b>0</b>	<b>8</b>	<b>100</b>
<b>2002</b>	<b>0.03</b>	<b>0.12</b>	<b>27</b>	<b>0</b>	<b>13</b>	<b>100</b>
<b>2003</b>	<b>0.02</b>	<b>0.08</b>	<b>17</b>	<b>0</b>	<b>4</b>	<b>100</b>
<b>2004</b>	<b>0.02</b>	<b>0.12</b>	<b>19</b>	<b>0</b>	<b>3</b>	<b>100</b>
<b>2005</b>	<b>0.02</b>	<b>0.13</b>	<b>29</b>	<b>0</b>	<b>5</b>	<b>100</b>
<b>2006</b>	<b>0.02</b>	<b>0.09</b>	<b>40</b>	<b>0</b>	<b>2</b>	<b>100</b>
<b>2007</b>	<b>0.01</b>	<b>0.04</b>	<b>41</b>	<b>0</b>	<b>2</b>	<b>100</b>

### **Strategies :**

- Improving the case-finding by
  - Conducting LEC & SAPEL
  - Increasing knowledge of physicians
  - Increasing knowledge of general population
- Treating the patients with MDT
- Rehabilitation of disabled cases through physical & social rehabilitation services

Country : I.R.IRAN

## Activities of Leprosy Elimination Programme

Duration : 1 Year

Activity		Unit	No. of Required Unit	Unit Price	Total Price
Training	Community	❖ Minutes of TV/Radio Programmes <ul style="list-style-type: none"> <li>○ Produced</li> <li>○ Broadcasted</li> </ul> ❖ Video tape/CD of Film ❖ Pages of Poster ❖ Pieces of public board	60 minutes 400 minutes * 400 tape/CD * 25000 pages 500 Pieces		
	Patients & their families	❖ Pages of Pamphlet ❖ Booklet	3000 pages * 500 booklet		
	Leprosy Program Coordinators	❖ Workshop ❖ Book (National Guideline)	2 Regional W. 2000 books *		
	PHC Physicians/Disease Control Staff	❖ Seminar  ❖ Pages of translated materials	40 Provincial S. 15 District S. 100 Pages		
	Skin / Infectious Diseases Specialists	Seminar	1 Seminars		
	Lab Technicians	❖ Workshop ❖ Pages of Poster	5 ( 3days) W. 1000 Pages		
National Technical Committee		Meeting	4 Meetings		
Joint meeting/workshop/field visit with Welfare & Rehabilitation Organization		❖ Meeting ❖ Workshop ❖ Field Visit	2 Meetings 1 Workshops 3 Field visits		
Joint meeting/workshop/field visit with Leprosy supportive charity society & Imam committee ( NGOs )		❖ Meeting ❖ Workshop ❖ Field Visit	1 Meeting 1 Workshop * 1 Field Visit *		
Nominal Registration	Written by hand registry	District Leprosy Registry Book	310 Books		
	Access-based registry	❖ Questionnaire ( Design ) ❖ CD/Floppy Disc ❖ Computer training Workshop ❖ Data Entry	1 Qes.  1 Workshop 11200 Records		
Special Activities		❖ LEC ❖ SAPEL	4 provinces 2 provinces		
Supervision & Monitoring		❖ Field Visit ( with feedback ) ❖ Data Analysis ( with feedback )	8 Field Visits 2 Reports / year		
Drug Providing		Free of Charge Blister Packs which have been provided by WHO			

## **Surveillance and reporting system :**

There are individual investigation form and also a line list for leprosy reporting which are filled and sent monthly :

- from peripheral level to district level ( by the 5<sup>th</sup> day of the following month ) ;
- from district level to provincial level (by the 12<sup>th</sup> day of the following month) ;
- from provincial level to national level (by the 20<sup>th</sup> day of the following month)

One important issue is emphasis on zero reporting .

**No deficit in drug supply has been seen through recent years.**

## **Monitoring & evaluation :**

Has been done by :

- external approach
  - through data analysis ( by province and district )
- internal approach
  - through field visits

An important issue has been emphasis on sending the feedbacks of above-mentioned approaches .

## **Training of staff and health education :**

In order to increase health care providers` knowledge about leprosy ,

- 9 national workshops
  - 3 regional workshops and
  - 41 peripheral workshops
- were conducted during recent 7 years .

During these educational programmes ,

- Physicians and health care experts,
- Health care technicians,
- Lab technicians and
- Behvarzes

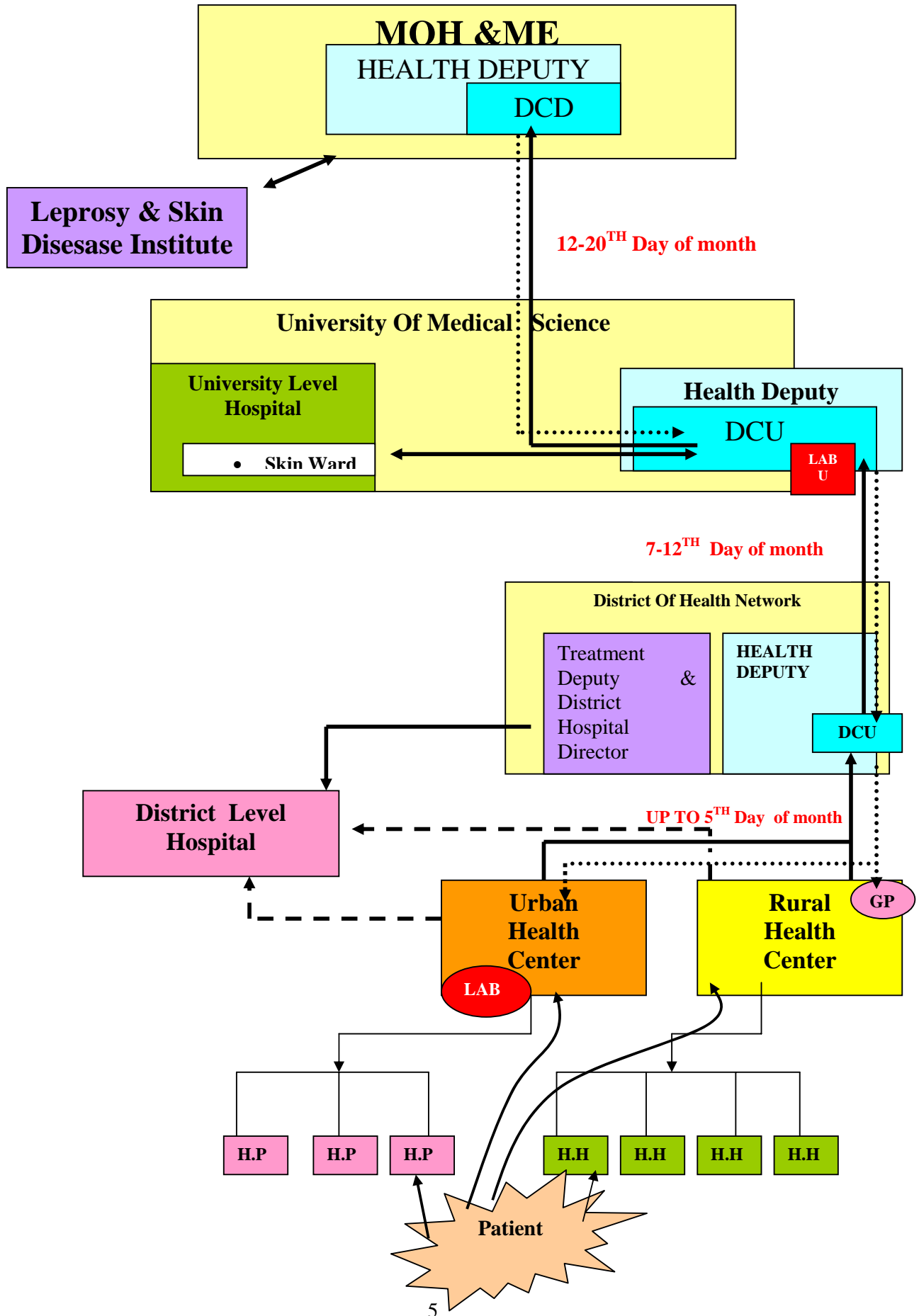
Have been trained.

Since 1996 , for community participation in the surveillance of leprosy , some educational materials have been prepared , published and distributed among the community and also some Radio-TV programmes have been broadcasting through different central and local stations .

## **Major problems:**

1. Insufficient compliance of some of patients due to side-effects of anti-leprosy drugs
2. Insufficient success in activating other organization for giving physical and social support to disabled patients in previous years .  
\*\*\* It should be mentioned that a good joint programme has been started since 2001 between MOH&ME and Welfare organization for this purpose .
3. Presence of many illegally entered Afghan people in I.R.IRAN
4. Presence of social stigma of leprosy among population ( unfortunately )

# NATIONAL LEVEL OF PHC



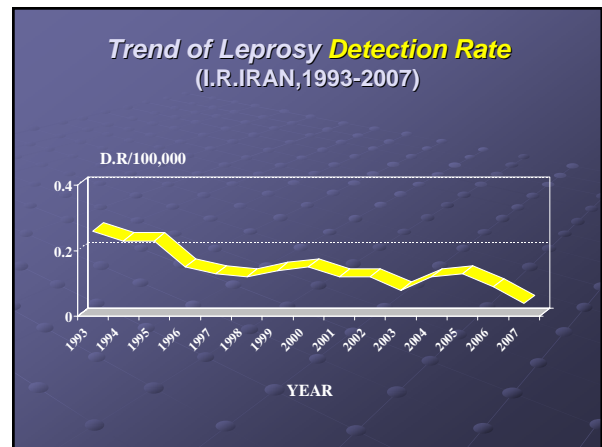
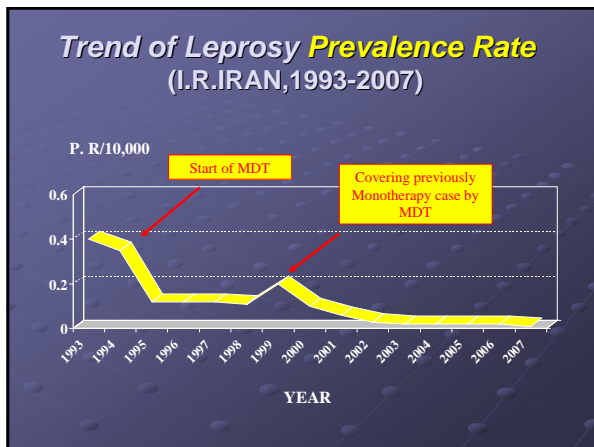


## LEPROSY SITUATION

( I.R.IRAN - 2007 )

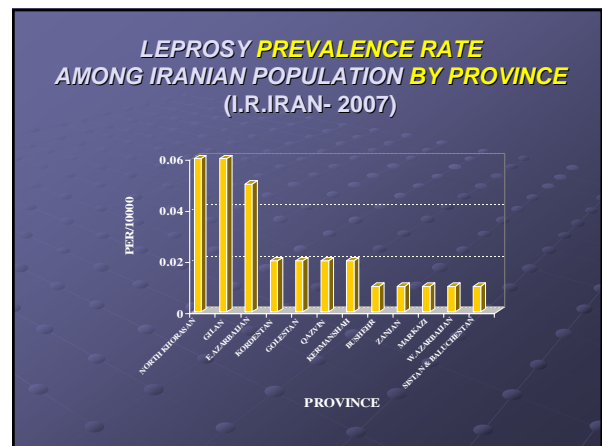
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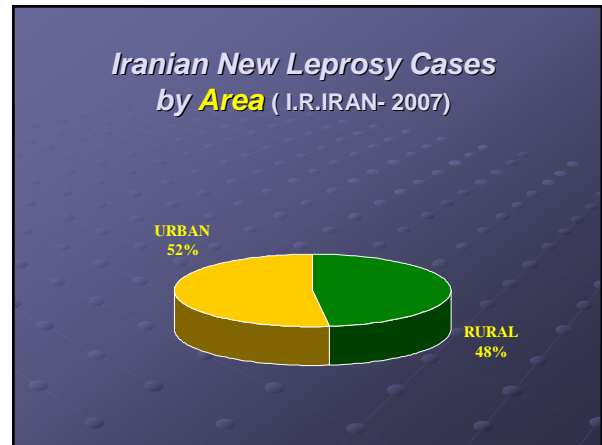
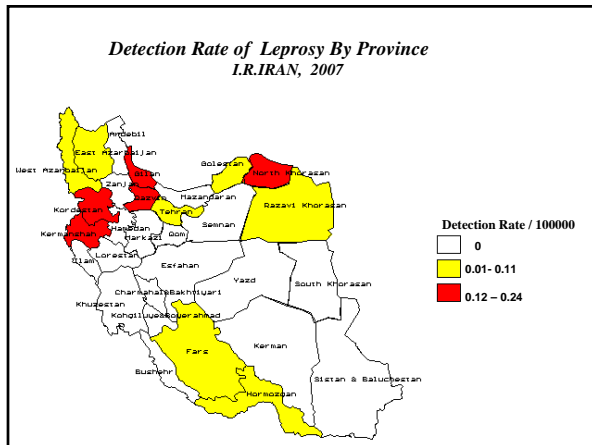
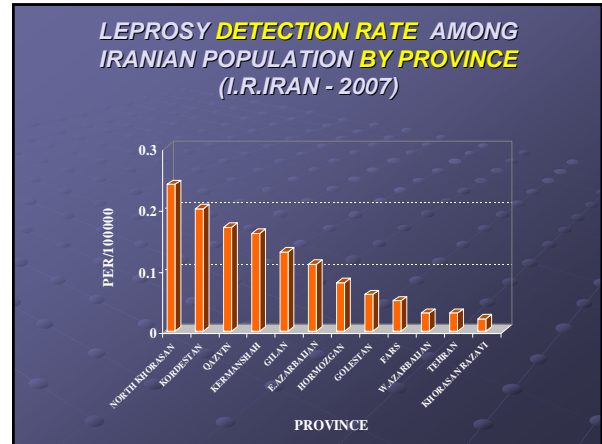
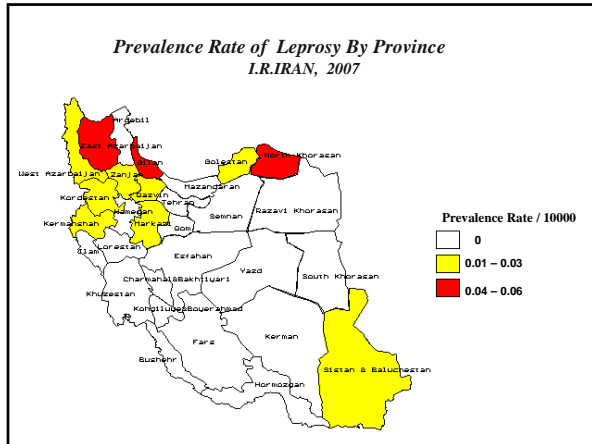
*Ministry of Health & Medical Education  
Disease Control Department*

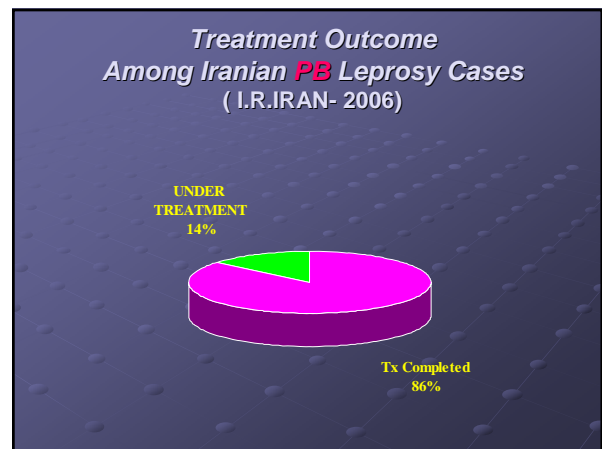
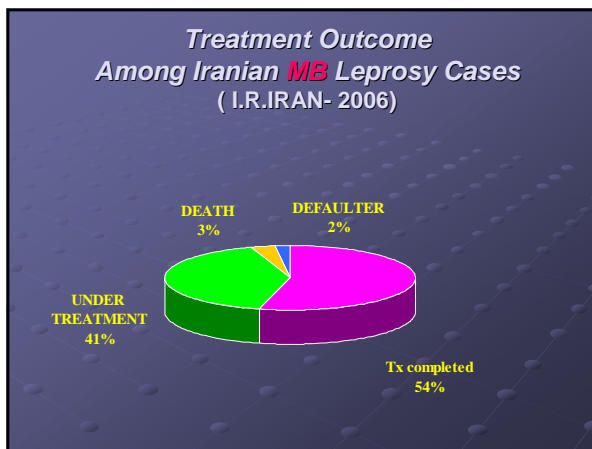


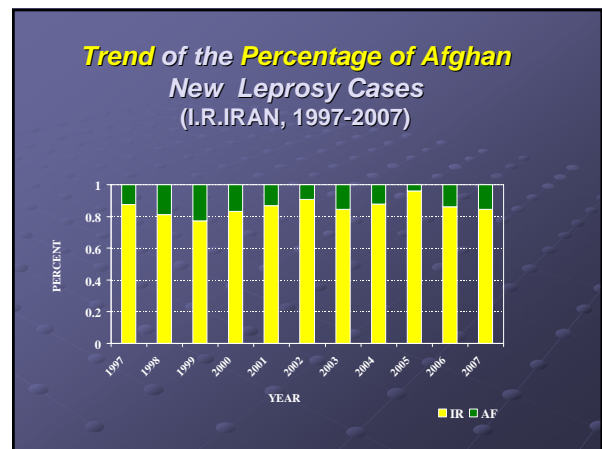
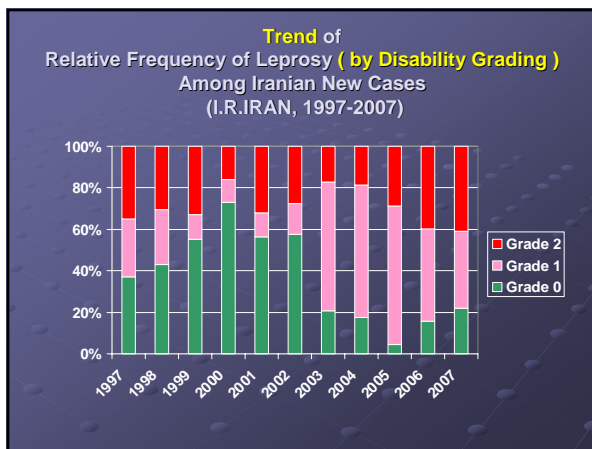
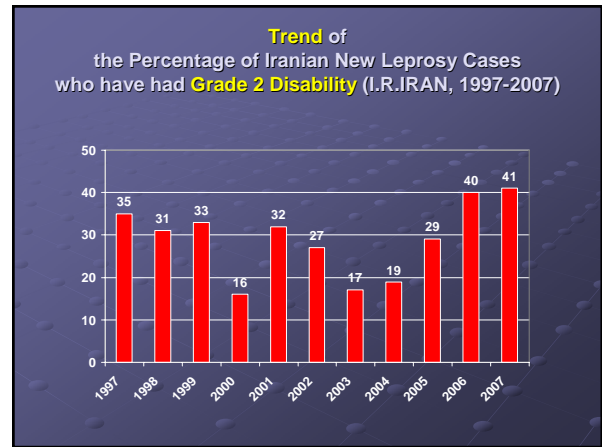
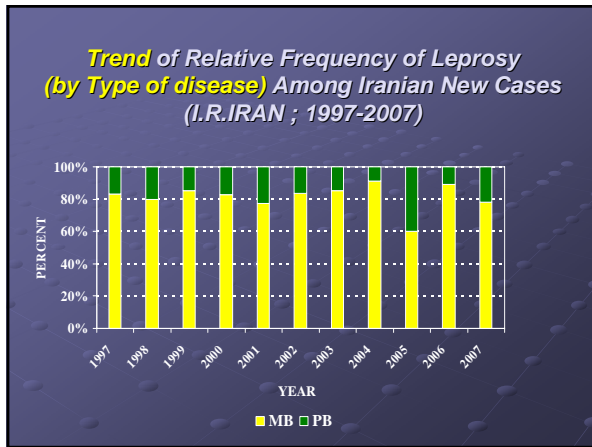
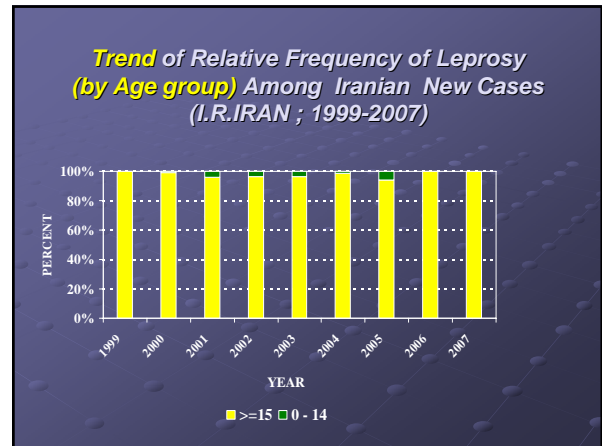
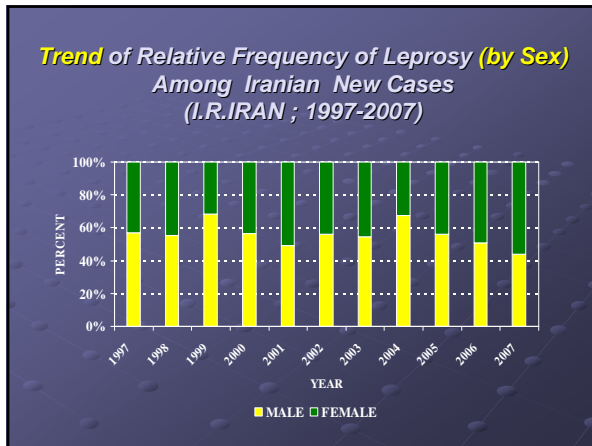
### Leprosy Detection & Prevalence Rates Among Iranian ( I.R.IRAN, 2007 )

- No. of under treatment patients : **65**  
**Leprosy Prevalence Rate : 0.01 / 10,000**
- No. of New cases : **27**  
**Leprosy Detection Rate : 0.04 / 100,000**









### Leprosy situation among Afghan cases

	Number	%
Area of residence : urban	5	100
Age group : under 15 y/o	0	0
Gender : Female	1	20
Type of Leprosy :		
MB	4	80
PB	1	20
Grade of disability :		
G0 disability	0	0
G1 disability	5	100
G2 disability	0	0
Having history of Close contact	0	0

### OBJECTIVE :

#### SUSTAIN OUR GAINS

#### Establishment of Leprosy Elimination Phase:

- > AT NATIONAL LEVEL IN 1992
- > AT PROVINCIAL LEVEL IN 1996
- > AT DISTRICT LEVEL IN 1997

### Specific Targets

	2001	2008 ( Target )	2007 (Current)
Prevalence Rate	0.06 / 10,000	↓	0.01/ 10,000
Grade 2 disability	31%	20%	41%
Default Rate	0%	0%	0%
Relapses	18	↓	2
MDT Coverage	100%	100%	100%

	P.R (/10,000)	D.R (/100,000)	G 2 disability	Default Rate	Relapse	MDT Coverage
2001	0.06	0.12	32	0	8	100
2002	0.03	0.12	27	0	13	100
2003	0.02	0.08	17	0	4	100
2004	0.02	0.12	19	0	3	100
2005	0.02	0.13	29	0	5	100
2006	0.02	0.09	40	0	2	100
2007	0.01	0.04	41	0	2	100

### TREND OF P/D RATIO I.R.IRAN(2000-2007)





#### The reasons of High P/D Ratio:

- Re-starting treatment of old mono-therapy cases ( Only during 2000 & 2001 )
- Existence of patients who are treated for more than 12 months (especially MB cases)
- Re-treating of defaulter cases
- Re-treating of irregular patient

### P/D RATIO I.R.IRAN-(2000-2007)

	Prevalence	Detection	P/D Ratio
2000	577	105	5.5
2001	447	88	5.07
2002	239	88	2.7
2003	139	66	2.1
2004	160	92	1.7
2005	181	90	2
2006	163	73	2.2
2007	76	32	2.3

“ Knowing is not  
enough;  
we must apply.



Willing is not  
enough;  
we must do.”  
- Goethe