I. About Turkey

II. About Turkish Medicines and Medical Devices Agency (TMMDA)

III. Rational Use of Medicines : Activities
ABOUT TURKEY
### DEMOGRAPHIC & ECONOMIC INDICATORS - 2013

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>76.7 million</td>
</tr>
<tr>
<td>Median Age</td>
<td>30.4</td>
</tr>
<tr>
<td>GDP</td>
<td>820 Billion $ (At current prices)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>$10,946</td>
</tr>
</tbody>
</table>

*TurkStat, Turkey’s Statistical Yearbook, 2013
**http://data.worldbank.org/indicator/NY.GDP.PCAP.CD
HEALTH TRANSFORMATION PROGRAM (HTP) IN TURKEY, SINCE 2003

- HTP was introduced in response to a number of problems
- At the turn of the millennium the performance of Turkey’s health sector:
  - Health outcomes
  - Financial protection
  - Patient satisfaction
  - Financial sustainability
HEALTH TRANSFORMATION PROGRAM (HTP)

- Efficiency
- Quality
- Access

HTP aimed to organize, fund and provide health care services in an effective, efficient and equitable manner.
### ACHIEVEMENTS (2000-2012)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2000</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation of life at birth (year)*</td>
<td>71</td>
<td>76.8</td>
</tr>
<tr>
<td>Infant mortality rate (%)*</td>
<td>31.6</td>
<td>11.6</td>
</tr>
<tr>
<td>USMR (per 1000 live births)**</td>
<td>40</td>
<td>11</td>
</tr>
<tr>
<td>Maternal mortality (per 100000 live births)**</td>
<td>64</td>
<td>15.4</td>
</tr>
<tr>
<td>OOP expenditure as a share of total health expenditure (%)**</td>
<td>27.6</td>
<td>15.4</td>
</tr>
<tr>
<td>Health services satisfaction rate (satisfied)*</td>
<td>39.5</td>
<td>74.8</td>
</tr>
</tbody>
</table>

* Turkish Statistical Institute  
** Health Statistics Yearbook 2012/General Directorate of Health Research
DRUG REGULATIONS

- Turkish Medicines and Medical Devices Agency (TMMDA)
- Social Security Institution (SSI)
ABOUT US
General Directorate of Pharmaceuticals & Pharmacy
(February 1946)

Turkish Medicines & Medical Devices Agency
(Affiliated to MoH since 2012)
The Turkish Medicines and Medical Devices Agency (TMMDA) is the governmental regulatory authority on human medicinal products, medical devices and cosmetics in Turkey.

- TMMDA is responsible for:
  - regulation
  - evaluation and
  - monitoring all these product groups
The TMMDA’s MAIN ACTIVITIES – I

- Marketing authorization of local/imported medicinal products
- Marketing authorization application dossier;
  - A. new medicinal product
  - B. generic medicinal product
  - C. biological and biotechnological medicinal product
  - D. traditional herbal medicinal product
  - E. advance therapy medicinal product
The TMMDA’s MAIN ACTIVITIES - II

- Medical devices
  Registration to Republic of Turkey Medical Devices and Drugs Databank (TITUBB)

- Cosmetic products
  Notification
The TMMDA’s MAIN ACTIVITIES - III

- Analysis and control process of medicines, medical devices, cosmetics, biotechnological products, enteral nutrition products, biological products
- GxP inspections & Certification of manufacturing sites of human medicinal products
- Market surveillance of medical devices & cosmetics
- Pharmaceutical Track & Trace System (ITS)
Harmonization with EU Legislation - 2005

The Turkish MoH has implemented a number of regulations to bring its pharmaceutical laws in line with those in the European Union.
PHARMACEUTICAL TRACK AND TRACE SYSTEM (ITS)

ITS is a system that traces and checks all processes of medicines with datamatrix at every node from production/importation to the patient.
ACTIVITIES FOR RATIONAL USE OF MEDICINES (RUM) IN TURKEY
RUM Activities 20 years

October 2010
Rational Drug Use (RDU) Branch

March 2012 - Rational Drug Use and Drug Supply Management Department – TMMDA

Representatives in all cities
RATIONAL DRUG USE UNIT

- 7 pharmacist
- 5 doctor
- 1 biologist
- 1 dietician
- 1 health officer
- 2 IT expert (engineer)
Aim

✓ Cooperation and coordination for all the stakeholders for activities for rational drug use,
✓ Change the behaviors of all stakeholders in drug use

Objective

✓ Complete and strengthen restructuring in order to conduct activities and raise awareness about RUM
RDU NATIONAL ACTION PLAN 2014-2017
STAKEHOLDERS

- Physicians
- Pharmacists
- Health Professionals
- Public
- Drug Industry
(6 Titles / 20 Strategic Objectives / 99 Actions)

<table>
<thead>
<tr>
<th>A. RDU Structuring</th>
<th>D. Allied Health Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>o 5 actions were planned under 1 Strategic Target Title</td>
<td>o 12 actions were planned under 3 Strategic Objective Title.</td>
</tr>
<tr>
<td>▪ Strengthening RDU structuring: 5 actions</td>
<td>▪ Promotion: 4 action</td>
</tr>
<tr>
<td></td>
<td>▪ Education: 7 actions</td>
</tr>
<tr>
<td></td>
<td>▪ Monitoring-Evaluation: 1 action</td>
</tr>
<tr>
<td></td>
<td>▪ Administrative Arrangement and Planning: 0 action</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Physicians</th>
<th>E. Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>o 29 actions were planned under 4 Strategic Objective Title.</td>
<td>o 23 actions were planned under 4 Strategic Objective Title.</td>
</tr>
<tr>
<td>▪ Promotion: 6 actions</td>
<td>▪ Promotion: 12 actions</td>
</tr>
<tr>
<td>▪ Education: 11 actions</td>
<td>▪ Education: 9 actions</td>
</tr>
<tr>
<td>▪ Monitoring-Evaluation: 10 actions</td>
<td>▪ Monitoring-Evaluation: 1 action</td>
</tr>
<tr>
<td>▪ Administrative Arrangement and Planning: 2 actions</td>
<td>▪ Administrative Arrangement and Planning: 1 action</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Pharmacists</th>
<th>F. Pharmaceutical Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>o 17 actions were planned under 4 Strategic Target Title.</td>
<td>o 13 actions were planned under 4 Strategic Objective Titles.</td>
</tr>
<tr>
<td>▪ Promotion: 4 actions</td>
<td>▪ Tanıtım: 4 faaliyet</td>
</tr>
<tr>
<td>▪ Education: 9 actions</td>
<td>▪ Promotion: 4 actions</td>
</tr>
<tr>
<td>▪ Monitoring-Evaluation: 1 action</td>
<td>▪ Monitoring-Evaluation: 3 actions</td>
</tr>
<tr>
<td>▪ Administrative Arrangement and Planning: 3 actions</td>
<td>▪ Administrative Arrangement and Planning: 5 actions</td>
</tr>
</tbody>
</table>
ACTIVITIES FOR RUM IN TURKEY - 1
ACTIVITIES FOR RUM IN TURKEY -2

- Drug utilization data with ATC/DDD
- Assessment and Education Meetings on different cities
ACTIVITIES FOR RUM IN TURKEY -3

- Drug Industry Representatives education
- Cooperation with international organisations
- RDU bulletin

- Prescription Information System (PIS)
PRESCRIPTION INFORMATION SYSTEM (PIS)

- Started in 2009
- Financially supported by World Bank
- Collects data from family physicians’ and specialist physicians’ prescriptions
- Integrated with the e-prescription system

PIS aims to:

- Monitor and evaluate physicians prescription behaviour.
- Maintains data feedback to physicians (individual data).
STATISTICS PROVIDED BY PIS

PIS maintains 4 basic data support;

- Statistics of individual physicians
- Statistics for individual health care facilities
- Trend analysis of provinces
- Statistics of provinces or whole country
According to the PIS data;
✓ Percentage of prescriptions that includes antibiotic in Turkey was %34.94 in 2011, %33.99 in 2012

✓ But Gaziantep was the top city prescribing antibiotics with %57.58 in 2011, %55.49 in 2012

✓ Gaziantep was choosen as a pilot area to search the reason for irrational drug use especially antibiotics
WHAT DID WE DO IN GAZIANTEP?

- July 5, 2013 - Meeting with 25 family physicians and directors of Health Institutions of Gaziantep
- September 23-25, 2013 - Meeting with family physicians, pharmacists and the member of hospital infection committees
- February 21-22, 2014 - Meeting with pharmacists, subject «Rational Use of Antibiotics»
- August 2014 – Meeting with family physicians and specialist physicians «Rational Use of Antibiotics»
<table>
<thead>
<tr>
<th>Months</th>
<th>2012</th>
<th>2013</th>
<th>Differences</th>
<th>% Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>%57.32</td>
<td>%49.61</td>
<td>- 7,71</td>
<td>- 13,45</td>
</tr>
<tr>
<td>November</td>
<td>%59.15</td>
<td>%49.71</td>
<td>- 9,44</td>
<td>- 15,95</td>
</tr>
<tr>
<td>December</td>
<td>%62.06</td>
<td>%55.94</td>
<td>- 6,12</td>
<td>- 9,86</td>
</tr>
</tbody>
</table>
NO ACTION TODAY NO CURE TOMORROW!!!
CONTACT US

Adress : Söğütözü Mahallesi 2176. Sokak No:5
        06520 Çankaya/ANKARA - TURKEY
Phone  : +90 312 218 30 00
Web site: www.titck.gov.tr
         www.akilciilac.gov.tr
E-mail : melda.ciba@titck.gov.tr
         gulsen.oner@titck.gov.tr
THANK YOU
BON APPETIT 😊