URBAN DYNAMICS
and DESTRUCTIVE SOCIAL EPIDEMICS

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Social and economic dynamics, the Republic of Kazakhstan
## Demographical dynamics

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2011</th>
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</thead>
<tbody>
<tr>
<td><strong>Population of RK</strong></td>
<td>14,862,7</td>
<td>16,581,2</td>
</tr>
<tr>
<td><strong>Birth rate</strong></td>
<td>14.9</td>
<td>22.87</td>
</tr>
</tbody>
</table>

The growing movement of youth from the countryside to the city. Currently, up to 60 per cent of the population lives in cities of Kazakhstan with population of 75 thousand to 2 million.
### Dynamics of Human Development Index (HDI)
(UNDP, 17 November 2011)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>1995</th>
<th>2011</th>
</tr>
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<tbody>
<tr>
<td>Life expectancy (years)</td>
<td>63.9</td>
<td>67.0</td>
</tr>
<tr>
<td>Expected years of education (years)</td>
<td>11.9</td>
<td>15.1</td>
</tr>
<tr>
<td>Average expected years of school education (years)</td>
<td>8.8</td>
<td>10.4</td>
</tr>
<tr>
<td>GDP per capita (U.S. $)</td>
<td>4464</td>
<td>10585</td>
</tr>
<tr>
<td>HDI (estimation)</td>
<td>0.636</td>
<td>0.745</td>
</tr>
</tbody>
</table>

Kazakhstan is on 68th position out of 187 (Russia - 66; Azerbaijan - 91; Uzbekistan - 115; Kyrgyzstan - 126; Tajikistan - 127), and belongs to the countries with high HDI.
Dynamics of economic development

Kazakhstan has moved from 72th position to 51st for the last 5 years on the main economic growth indicators (Joint Economic Forum, 2011).

Assured oil reserves in Kazakhstan are from 5 to 6.4 billion tons (comparable to the reserves of Libya and Russia).
Explored reserves of uranium - 1.6 million tons (second in the world).
Destabilizing factors (data 2011)

- Drug dependence: 1.7 per cent of population (281,880 people);
- Alcohol dependence: 4.1 per cent (679,829 people);
- Destructive sects: more than 1,000; (40,000 - 60,000 people are involved);
- Computer dependence: 2 per cent of general population (331,624 people); 10-15 per cent among children (up to 17 years)
Under the definition of «destructive social epidemics» we include the processes of:

- development of adaptation disorders with signs of demoralization syndromes (up to 12%) – vulnerable groups to destructive chemical and psychological addiction;
- involvement in chemical dependencies (alcohol and drugs) - up to 7%;
- psychological dependence (sects and extremist groups, gambling, computer addiction) - up to 2%.
Actual characteristics of destructive social epidemics:

– Have tendencies to uncontrolled spreading;

– Have direct and indirect interdependence;

– Direct destructive impact of the destructive social epidemics (including the co-dependency of family members) affects a substantial part of the society – up to 40% of the whole population;

– Indirect psycho-traumatic impact affects the whole society (due to globalization and unitary information channels);

– Direct economic deprivation, as a result of destructive social epidemics spreading, comes to 3 - 5% of GDP;

– The traditional countering methods (based on existing methods to counter the biological epidemics) are low effective or ineffective at all.
Main questions we have faced

- Are there any significant reasons (other than the superficial description specified above) to combine the destructive processes above into one generic phenomena of social epidemics, and what are the specifics of these epidemics?
- What scientific dividends could be obtained as the result of social epidemics concept development?
- What could gain the technological practice of prevention of destructive processes above in general and in certain areas in particular?
- What direct results of taking control over social epidemics spread the society could get in the short-, medium- and long-term view?
- What indirect results ensuring sustainable and high-speed social development could give the institutionalization of proposed social epidemic prevention methods?
- Will these methods be more ecological, economical and effective in comparison with the traditionally used methods, or will they require substantial social restrictions and costs with an unpredictable outcome?
Research-technical programme:
Effective prevention of destructive social epidemics spreading
(drug dependence, extremism, terrorism, involvement in criminal
groups, destructive sects, gambling)

Duration: 2004-2013

Implementer: National research centre on medical and social
problems of drug addiction, Ministry of health,
Republic of Kazakhstan
Personalities that provide with psychological stability in hostile environments:

- full-fledged completion of personality identification;
- positive (identification) life scenario;
- developed skills of free and responsible choice;
- developed internal locus of control;
- availability of psychological resources needed to implement positive life scenario;
- adequate awareness of hostile and destructive agents with respect to main life scenarios (identification).
The average profile of psychological resistance properties in differentiated population groups

Si – personal self-identification  Ic – internal locus of control
Ps – positive vital scenario  Rs – resources sufficiency
Rch – ability of responsible choice  la - information awareness

High level of resistance (minimal risk) - up to 8%
Middle level of resistance (medium risk) - up to 72%
Low level of resistance (maximum risk) - up to 18%
**Involvement in the destructive social epidemics: components of primary prevention standard**

1. Constant monitoring of risk's levels of different age groups towards involvement in chemical and psychological dependencies;

2. Introduction of special diagnostics computer's programmes to monitor the high-risk groups according to their age, occupation and etc.;

3. Institutional and human capacity building activities (education curriculum, school psychologists, social workers, educational specialists);

4. Conduction of focused training, consultations, psychotherapeutic activities for high risk groups and their families with assistance of comprehensive computer's programmes.
Intermediate results

Starting from 2007-2008, there has been a clear and steady downward trend in the primary and general morbidity rates of mental and behavioral disorders due to consumption of psychoactive substances.
### Monitoring levels of the destructive social epidemics spreading

<table>
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<tr>
<th>Levels</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td><strong>Zero level</strong></td>
<td>situation is not observed; non-existing opportunities for effective impact</td>
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<tr>
<td><strong>1 level</strong></td>
<td>incomplete information about the situation; lack of opportunities for effective impact</td>
</tr>
<tr>
<td><strong>2 level</strong></td>
<td>complete and reliable information about the situation; limited opportunities for effective impact</td>
</tr>
<tr>
<td><strong>3 level</strong></td>
<td>complete and reliable information about the situation; scope and effectiveness of countering efforts comparable to the scale of the problem and have a significant impact</td>
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Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO definition, 1958).

Proposed functional clarifications:

- **Somatic health** – the ability to be present and to function in reality as valid biological entity;
- **Mental health** – the ability to adequate perceptive the reality and interact with it as valid subject;
- **Psychological health** - the ability of effective self-organization ensuring adequate adaptation, resistance and human safety in hostile environment.
Thank you for attention!