AIMS: To analyse from official health statistics selected indicators of health status of respondents with different risk profile (detected during the realization of the project in 2002), with emphasis on the respondents with metabolic syndrome (MS).

MATERIALS AND METHODS: Out of 6,847 respondents (aged 15–64 years of six model districts of Slovak Republic) 6,306 persons were identified for analysis. Hospitals' discharges of respondents were analysed during 5 years for diseases of the circulatory system (DCS) (ICD-10 codes I00–16), malignant tumors (MT) and/or diabetes mellitus (DM) according to their different risk profile.

The criteria of IDF (2005) were used for MS (without glycaemia, which was examined only in 1 district). Distribution of respondents to 3 basic groups according to blood pressure (BP) and waist circumference (waist-c) presents appurtenant table. Data analyzed in this presentation relate to respondents without personal history of diabetes in 2002. Statistical criteria used: risk ratio of unavourable risk profile 15 – 64 year group of respondents from randomized survey in 2002 (calculated on Slovak population).

### RESULTS

#### Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>MS</th>
<th>Non-diabetics</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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<tbody>
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<td>45</td>
<td>55</td>
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<td>75</td>
<td>85</td>
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</tr>
<tr>
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<td></td>
<td>13</td>
<td>25</td>
<td>35</td>
<td>45</td>
<td>55</td>
<td>65</td>
<td>75</td>
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</tbody>
</table>

#### Graph 1a

**Dominant risk factor in respondents hospitalized for DCS (%)**

- **Group 1:** MS vs. Non-diabetics
- **Graph 1b:** Cumulative hospitalization time for DCS

#### Graph 2a

**Dominant risk factor in respondents hospitalized for DCS (%)**

- **Group 2:** MS vs. Non-diabetics
- **Graph 2b:** Cumulative hospitalization time for DCS according to groups

#### Graph 3a

**Cumulative hospitalization time for DCS**

- **Men:** MS (waist-c <= 80 cm), Non-diabetics (waist-c <= 80 cm)
- **Women:** MS (waist-c <= 80 cm), Non-diabetics (waist-c <= 80 cm)

#### Table 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>DCS</th>
<th>MT</th>
<th>DM</th>
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<td>Women</td>
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</tr>
</tbody>
</table>

#### Graph 4

**Standardized incidence of selected acute DCS in population of SR in 1996 – 2006**

- **Men:** Myocardial infarction (I61), cerebral infarction (I63), ischemic heart disease (I25), stroke (I60–I64)
- **Women:** Myocardial infarction (I61), cerebral infarction (I63), ischemic heart disease (I25), stroke (I60–I64)

#### Graph 5

**Standardized mortality for DCS in 1981-2000**

- **Men:** Myocardial infarction (I61), cerebral infarction (I63), ischemic heart disease (I25), stroke (I60–I64)
- **Women:** Myocardial infarction (I61), cerebral infarction (I63), ischemic heart disease (I25), stroke (I60–I64)

#### Conclusions:

The growing prevalence rates of risk waist-circumference, non-treated hypertension, metabolic syndrome and diabetes mellitus 2.3% in population of SR represent not only an important health, but also economical problem. This might be a reason why incidence rates of dominant acute DCS and mortality rates of DCS are either stagnating, rise or decreasing in Slovakia (to contrary to the other developed countries in Europe (graphs 4, 5). The actual health status of the population in Slovakia is the main challenge to establish new national intervention programs, emphasizing particularly the need of systematic education of population.