About the town

The town of Sokolov is the seat of administration of a district in the Carlsbad region. The town has 26,000 inhabitants (average age 36 years). The municipal office has 93 employees, 3 of them are elected officials. The city council has 27 members – representatives of 5 political parties. The executive board of the city council has 9 members.

The town of Sokolov fully or partly owns or controls the following areas through its companies: Council houses and an indoor swimming pool, maintenance and lighting of communications, maintenance of public parks, waste disposal. The sport agency operates an ice hockey stadium and other places for leisure sports. The municipal cultural agency maintains the town theatre, cinemas, and organises various educational activities. The town hall supports 9 primary schools, 1 primary art school, 2 nursery schools (with 6 nursery schools in the reserve capacity). There is also the town police department.

Social services are provided for elderly citizens in homes for elderly with day care centres, also for mothers with children in need in the asylum home and in the home for homeless people. The town also supports several sheltered workplaces for the handicapped and one house with twelve specially built flats for their needs.

The town hall also supports several non-profit organisations, sports clubs and cultural societies through its grant agency (6 million Czech Crowns yearly). The town hospital provides health services for the district, and other outpatient services are provided by private specialists.

Project background

The pilot worksite health promotion study, performed in research and development personnel between 1973 and 1998, based on a comprehensive screening and intervention system encompassing lifestyle deficiencies, somatic risk factors, perceived factors of social and socio-economic environment, risky personality traits and behaviour types in addition to job pressures. Computer processing of primary items converged the information into complex health risk factors requiring specific advice and suggestions. Health state development of study respondents and their adherence to health recommendations was assessed repeatedly. In the course of the study, the screening procedure, consisting of basic questionnaire, medical and psychological interview, was standardised and validated and employed in several WHP projects.

Respondents in two of the five organisations incorporated in our recent ENWHP project as Models of Good Practice are civil servants in public administration authorities, included because they can directly or indirectly influence dissemination of WHP programmes and because the occupational health problems in the work of civil servants are similar to occupations our team studied in preceding projects.
Up till now, the screening and intervention programme in the Central Bohemia Regional Office included the managerial staff and is planned to be extended to other employee groups; the next phase of WHP procedure standardisation — as described below — is to be tested based on the overall sample:

A scientific approach

The project in the town of Sokolov has been conducted by Jana Kociánová, M.D., who completed a two-year course in health promotion and behaviour modification, organised by the National Institute of Public Health, Prague.

The programme was attended by 25 employees (average age 45.3 years, 19 females) of the municipal office – heads of departments and persons with material responsibility. The participants were screened using questionnaires:

a) health state, lifestyle and work conditions, screening examination and standard questionnaire
b) somatic examination including body fat (bioimpedance),
c) biochemical examination of blood serum (lipids, fasting glycaemia) and urine (presence of proteins and glucose).

The questionnaire data were computed with the use of the PC programme for evaluation of health risks in work and lifestyle. Results of the examination were discussed individually with the participants in the intervention interview focused on possible preventive activities and changes in faulty lifestyle. Strategies were proposed for suitable diet, physical activity, coping with stress and relaxation, as well as smoking cessation for smokers. The participants’ motivation for change of lifestyle (diet, physical activity, smoking) was assessed.

Screening results

Smoking – 4 smokers (3 women), 1 occasional smoker, 5 ceased smoking, 15 non-smokers.

Weight (BMI) – normal BMI 8 participants (32%), 2 with BMI at the lower limit of norm; 10 participants overweight (40%), 8 of them of abdominal type with a higher health risk (waist: men 94 - 102 cm, women 80 - 88 cm); 5 participants (20%) are of abdominal obesity (I. level), 4 of them with a high health risk (waist: men > 102 cm, women > 88 cm); central obesity II. and III. level with a high health risk was found in 2 persons.

Blood pressure – higher blood pressure was reported for 7 people, unstable blood pressure for 1 person, diagnosed and treated hypertension for 3 people; ischaemic heart disease or angina pectoris – diagnosed and treated for 2 people, atherosclerotic carotids found for 1 person.

Laboratory findings

Blood lipids – higher blood cholesterol reported by 8 persons, 4 of them treated, higher glycaemia reported by 3 persons; TC > 5.2 mmol/l was found in 16 persons (64%), TC > 6 mmol in 3 persons; TAG > 1.9 mmol/l was found in 9 persons (36%), in 3 persons TAG > 3.0 mmol/l; HDL < 1.0 mmol/l was found in 3 persons, 1 of them < 0.9 mmol/l.

Fasting glycaemia – in 8 persons was found > 5.6 mmol/l, 3 of them > 6 mmol/l. Only 6 (24%) persons had all blood values in normal ranges.

Urine (qualitatively) – glucose present in 1 and proteins in 2 persons; 23 (92%) persons had normal findings.

Allergies – 10 persons suffer from some form of allergy (40%).

Health state, lifestyle and working conditions

The risk was rated on the scale 0 - 100%, risk in average population being 40%.

Shortcomings in lifestyle – nobody was without a risk; 4 persons had 1 risk factor, 12 persons had 2-4 risk factors, 9 persons displayed 5 and more risk factors;

Job pressures – 9 persons reported no feelings of job stress, 14 persons reported 1-4 job stress factors, 2 persons complained of 5 job stress factors; Bodily health state – 2 participants displayed no risk factor, in 19 persons 1-3 risk factors were found, in 4 persons there were more than 6 risk factors, 1 of them displayed 14 risk factors.

Psychological condition – in 10 persons no risk was found, 12 individuals had 1-3 risk factors, 2 persons displayed 4 psychological risk factors.
On the whole, the health intervention, especially in unhealthy lifestyle, was fully justified in this group, and has been applied to all participants.

**Present state**

Profile of deviation scores is derived from the items of the basic questionnaire verified – if possible – by the medical and psychological interview. The table of secondary dimensions indicates weak points in life and work style, health and condition, and personality and behaviour of the individual respondent. This information is given to the respondent in a written form. Additionally, a verbal estimate of the ensuing health risk and advice and recommendations for behavioral change is given during the interview. All individual data are treated as confidential; the group characteristics are available to the human resources department of the organisation together with recommendations for support of the WHP programme.

The experience gathered now permits standardisation and formalisation of the next phases of the WHP procedure.

**Aim**

Standardisation and formalisation of both the attachment of intervention to screening and the subsequent evaluation of the intervention success.

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**Project for further development**

An expert system will be developed that is compatible with the Manual of Prevention issued in Prague by the National Institute of Public Health. (The Manual was inspired by the semi-programmed “Clinician Health Promotion Handbook” (1986) by R.A. Fried, D.C. Iverson and J.P. Nagle.) The expert system will take full health state information and health determinants into account and will have two interrelated but separate issues:

- As part of the intervention, characteristics of individual health risk and appropriate advice for behavioural change, and suggested preventive examinations will be prepared for the respondent in written form, in order to provide maximum support for the active attitude of respondents to their health.

- As guidance for the follow-up, a set of individual specific indicators of health impact of the intervention will be drawn up, namely in the following areas: further health state development, changes in somatic and psychological risk factors identified by the screening procedure, adherence to the suggested changes in life and work style, and compliance with the recommendations for further preventive examinations.

**Conclusions**

Together with the use of the standard screening procedure in small and medium enterprises – of private and public administration sectors – partial standardisation of individually tailored intervention and follow-up procedures would permit consistent assessment of the impact of worksite health promotion projects using the same method, in spite of diversity of local conditions and involvement of many preventive health care providers.