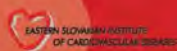


# SECONDARY PREVENTION OF CORONARY HEART DISEASE: PATIENT'S SENSE OF COHERENCE AND HEALTH-RELATED BEHAVIOUR

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## BACKGROUND

Health endangering behaviours have been identified as important risk factors for coronary heart disease (CHD) and lifestyle changing interventions promise considerable benefit to patients with CHD. One approach that assesses factors which promote or enhance healthy behaviours has been developed by Antonovsky (1979, 1987) and assumes that the way people view their life will influence their health. The aim of this study was to explore whether the sense of coherence (SOC) is associated with health endangering behaviour among patients with established CHD after controlling for sociodemographic and medical variables.

## METHODS

### SAMPLE

- 243 pts (79% male; 56.5±7 yrs.)

### MEASURES

- gender
- ethnicity
- socioeconomic position
- functional status (NYHA and CCS)

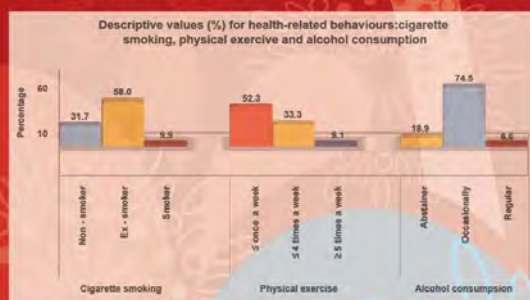
- disease duration
- SOC-13 scale ( $\alpha=0.76$ ; Antonovsky, 1987)
- health behaviour:
  - Current smoking status
  - Diet
  - Physical exercise
  - Alcohol consumption

### STATISTICAL ANALYSES

- regression analyses
- Independent variable: SOC scale
- Dependent variable: health behaviours
- Controlled for: sociodemographic and medical data

## RESULTS

Patients with a higher level of SOC were more likely to be ex-smokers compared to smokers (OR 1.09; 95% CI: 1.02-1.16;  $p<0.05$ ). For exercising, a higher level of SOC was associated with higher exercise scores (OR 1.03; 95% CI: 1.01-1.06;  $p<0.05$ ). SOC was not associated with diet behaviour and alcohol consumption.



## CONCLUSIONS

SOC has been found to be related to health behaviours. CHD patients with higher level of SOC have a higher probability to be ex-smokers compared with those with a lower SOC and moreover CHD patients with higher level of SOC have a higher probability to exercise more frequently. The behaviours under examination here, such as smoking, exercise, diet and alcohol consumption, are determined by many factors which need to be taken into account when designing a successful intervention.

## PRACTICE IMPLICATIONS

CHD patients with a low SOC need more attention regarding the improvement of their health-related behaviour in order to reduce their risk of recurrences.

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### ACKNOWLEDGEMENT

This work was supported by the Slovak Research and Development Agency under contract no. APVV-20-038305.

Furthermore, this work was partially supported by the Agency of the Slovak Ministry of the Education for the Structural Funds of the EU, under project no. ITMS: 26220120058

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# EUROPEAN JOURNAL OF PUBLIC HEALTH

Volume 20 Supplement 1

## SUPPLEMENT

### 3RD EUROPEAN PUBLIC HEALTH CONFERENCE

Integrated Public Health

*Amsterdam, 10–13 November 2010*

#### ABSTRACT SUPPLEMENT

*Guest editors: Niek Klazinga, Dineke Zeegers Paget*

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95% CI = 1.71–4.07; RR = 3.04, 95% CI = 2.01–4.61). Similar results were found for CVD and cancer mortality, except in women in the analyses for CVD mortality. In the higher WC-BMI categories no significant associations were found, except for CVD mortality in men.

#### Conclusions

In elderly, a larger WC is associated with a higher mortality risk. For the combined WC-BMI categories, a high mortality risk seems to be most apparent in the lowest category.

### Towards a European Diabetes Information System: from St.Vincent Declaration to EUDIP, EUCID, BIRO and EUBIROD. Are we getting closer?

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#### Issue

Chronic diseases are becoming a growing burden to the health care systems all over the world and also in Europe. One of the most prominent is Diabetes Mellitus. Health care planning and prevention can only be performed on reliable information at both the National and European level.

#### Description

Measuring performance in diabetes care requires standard procedures and accurate information. The foundations were laid in 1989 during the St. Vincent initiative. Standard indicators were defined for the first time in this occasion. The progress made in the last 20 years allow gathering national data through country representatives and automatically producing quality and outcomes indicators from existing databases.

#### Results

During the past 10 years, the European Commission (DG-SANCO) supported four projects to create a system for diabetes reporting. Standard EU indicators were defined by EUDIP (EUropean Diabetes Indicators Project). The EUCID project (EUropean Core Indicators in Diabetes) included 19 country representatives to collect national indicators for international comparisons. This form of collection proved to be laborious and time consuming. BIRO (Best Indicators through Regional Outcomes) delivered a solution to automate the process. The sequel EUBIROD (EUropean Best Indicators through Regional Outcomes Diabetes) will collect regional data from 20 European countries, to produce a European report for the first time ever. Almost all EUCID participants joined the EUBIROD project, including the IDF.

#### Lessons

Reliable data can be collected using the BIRO system, a standard approach that aims to safely connect medical records in the EUBIROD Consortium from the local to the European level.

### Predictors of social participation 1 year after kidney transplantation

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#### Background

Although a number of studies exist exploring the social participation of patients after kidney transplantation (KT), only a few explore its association with medical and psychological factors in a longitudinal study. We focused on the role that side-effects of immunosuppressive treatment, well-being and mastery 3 months after KT play in social participation at 1 year after KT.

#### Methods

A total of 76 patients (53.9% male; average age 47.5 ± 13 years) in the third month (T1) and 1 year (T2) after KT provided their socio-demographic (age) and medical data (Glomerular function measured by the Cockcroft-Gault equation) and completed the Social participation questionnaire ( $\alpha = 0.84$ ), the End-Stage Renal Diseases Symptom Checklist-Transplantation Module (ESRD-SCL-TM) ( $\alpha = 0.84-0.91$ ), the General Health Questionnaire (GHQ-28) ( $\alpha = 0.67-0.94$ ) and the Pearlin Mastery Scale ( $\alpha = 0.68$ ). Linear regression was used to identify the predictors of social participation at T2, and age, glomerular function, ESRD-SCL-TM subscales, GHQ-28 subscales, mastery and social participation at T1 were set as independent variables.

#### Results

The model consisting of low social participation ( $\beta = 0.79$ ;  $P \leq 0.001$ ), severe depression (GHQ-28) ( $\beta = 0.33$ ;  $P \leq 0.05$ ) and low mastery ( $\beta = 0.41$ ;  $P \leq 0.001$ ) at T1 predicted lower social participation at T2 and explained 75.6% of the variance.

#### Conclusions

Social participation 1 year after KT is predicted by lower social participation, more depression and lower mastery in the third month after KT. Earlier social participation and psychological factors seem to play a more important role in future social participation than kidney function and side effects. This needs to be considered in programmes focused on increasing the social participation of patients after kidney transplantation.

### Secondary prevention of coronary heart disease: patients' sense of coherence and health-related behaviour

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#### Background

Reducing mortality from coronary heart disease (CHD) remains a public health priority with much of the emphasis on prevention on determinants of CHD focusing not only on those who are at high risk of developing such disease in the future but also on those who have developed symptoms of CHD. The aim of this study was to explore whether the sense of coherence (SOC) is associated with health endangering behaviour among patients with established CHD after controlling for socio-demographic and medical variables.

#### Methods

The sample consisted of 243 consecutive patients with established CHD (mean age 56.5 ± 7, 21% female) from the East Slovakian Institute for Cardiac and Vascular Diseases. Medical and demographic data were obtained from medical records. Self-report data about patients' health behaviours (smoking, exercise, diet and alcohol consumption) were gathered via a structured interview. SOC was measured with the 13-item Orientation to Life Questionnaire.

The relationship between patients SOC and health behaviour was examined using regression analyses.

#### Results

Patients with a higher level of SOC were more likely to be ex-smokers compared with smokers [odds ratio (OR) 1.09; 95% confidence interval (CI) 1.02–1.16;  $P < 0.05$ ]. For exercising, a higher level of SOC was associated with higher exercise scores (OR 1.03; 95% CI 1.01–1.06;  $P < 0.05$ ). SOC was not associated with diet behaviour and alcohol consumption.

#### Conclusions

A higher level of SOC appears to be associated with being an ex-smoker and with more exercise behaviour. The behaviours under examination here, such as smoking, exercise, diet and alcohol consumption, are determined by many factors which need to be taken into account when designing a successful intervention. The present study shows that CHD patients with a low SOC need more attention regarding the improvement of their health-related behaviour in order to reduce their risk of recurrences.

### 'How would you go about that? I don't know.' A qualitative study on perceptions of prevention of knee pain and disability

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#### Background

Osteoarthritis is common and a major cause of pain and disability in older adults. Many epidemiological studies examining risk factors exist, as do opportunities for prevention. Despite this, little has been done on primary prevention. This study aimed to explore perceptions of prevention of knee pain across UK agencies. We aimed to investigate participants' understanding of prevention, barriers to prevention and identify if and how prevention is embedded within practice.

#### Methods

Twenty-five semi-structured interviews were undertaken with agencies playing a role in prevention (e.g. health/social-care professionals, community groups/charities, district council). Participants first gave views on knee pain prevention. We then employed an innovative approach using Dahlgren and Whitehead's 'rainbow' of health determinants to prompt discussion. Interviews were digitally recorded and transcribed. Thematic analysis was undertaken.

#### Results

Preliminary findings highlight a dominant theme of uncertainty. Participants were unsure about whether prevention was possible and what form it should take. However, as interviews progressed, most participants identified strategies for primary and secondary prevention (joint protection, exercise, diet, education and information). Different approaches to weight loss advice existed, although the need for consistent messages was outlined. Participants recognized the importance of multidisciplinary working, the role of social and community networks, living and working conditions and schools. Barriers to prevention included lack of follow-up, limited time with individuals, financial constraints, costs and poor access to facilities. Responsibility for prevention was seen to rest with individuals despite a seemingly incompatible view that older adults do not prioritise joint conditions thus limiting motivation and uptake of prevention.

#### Conclusions

Developing prevention strategies for joint pain in older people needs to combine understanding of specific social determinants with a co-ordinated multi-agency approach to supporting people. This approach should be integrated with existing public health campaigns and requires further action by policy makers, researchers, clinicians and patients.

### A case-control study on systemic hypertension and risk of obstructive sleep apnoea syndrome conducted in Yerevan, Armenia

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#### Background

Several studies suggest that obstructive sleep apnoea syndrome (OSAS) increases the risk of developing hypertension (HTN) and can be as serious risk factor as diabetes. OSAS has been recognized in the Western world as a public health burden, but there have been no OSAS-related epidemiological studies conducted in Armenia.

#### Methods

The study utilized a case-control design to examine the association between systemic HTN (outcome measure) and risk of OSAS in adult people living in Yerevan, the capital of Armenia, considering all known confounders suggested by the literature. The control variables of interest were: age, gender, body mass index, neck circumference, waist circumference, waist-to-height ratio, smoking status, weekly alcohol consumption, coffee consumption, weekly physical activity, and presence of diabetes and/or renal diseases.

The study population (108 cases and 157 unmatched controls) came from the sample population (170 hypertensives and 578 normotensives) of a population-based Hypertension Extended Study in Armenia conducted in 2004 by the Armenian Medical Association in Yerevan.

Blood pressure was measured in a standardized fashion using conventional mercury sphygmomanometer and following guidelines adopted by the European Society of Hypertension. Risk of OSAS was evaluated by the Berlin Questionnaire.

#### Results

In a logistic regression model adjusted for age, neck circumference and co-morbidities (diabetes and/or renal disease), the odds of HTN in people with high risk of OSAS was 2.17 times greater (95% CI = 1.02–4.63) than odds of HTN in people with low risk of OSAS.

#### Conclusions

This case-control study found an independent positive association between high risk of OSAS and systemic HTN. The study identified fat deposition in the neck as an influential determinant of HTN and OSAS risk. Other independent risk factors for HTN included older age, development of diabetes and/or renal disease.

The study recommended to increase population awareness of OSAS risk factors, symptoms and consequences, as well as to consider the OSAS when developing national clinical guidelines, particularly in those related to the management of HTN.

### Self-rated health as an outcome predictor in patients with chronic cardiopulmonary disease

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#### Background

Self-rated health (SRH) predicts outcome in general population but such information remains limited for patients with chronic cardiopulmonary disease. As the global population ages, the burden of chronic heart failure (CHF) and chronic