

### Sesión Temática/Thematic sessions

Monitorización de las enfermedades  
cardiovasculares y factores de riesgo: resultados  
del proyecto EUROCISS

Monitoring of cardiovascular diseases and risk  
factor: Results of the EUROCISS project

Viernes 3 de Octubre / Friday 3, October  
15:00:00 a/to 16:30:00

### MONITORING OF STROKE AND OTHER CEREBROVASCULAR DISEASES

Veikko Salomaa  
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**Background:** Stroke is an important public health problem constituting approximately 10% of total mortality and 25% of cardiovascular mortality in European populations. Even more important than mortality is morbidity, since a stroke often requires prolonged hospitalisation and causes permanent disability.

**Methods and results:** The most reliable way to monitor the occurrence of stroke events is population-based stroke registers. These have been used for example in the WHO MONICA Project. The problem with the stroke registers is that they are laborious and cannot cover large geographical areas. Another option is to use hospital discharge register data, preferably linked together with mortality register data. These can cover the whole country and all age groups, but are not based on standardized data collection procedures. We have recently shown that such a record linkage fairly reliably identifies first ever strokes in Finland in persons aged <75 years. However, re-hospitalisations for elective investigations or rehabilitation purposes also often received the ICD code of acute stroke in the Finnish Hospital Discharge Register, which made the identification of recurrent stroke events somewhat unreliable. Recent results of the FINSTROKE project show that during the 1990s almost all patients with an acute stroke had either MRI or CT investigation or autopsy, which makes the distinction of haemorrhagic and ischaemic strokes fairly reliable.

**Conclusions:** Caution is needed when interpreting hospital discharge data on the occurrence of stroke. Record linkage of the hospital discharge register data with the mortality register data can be used for monitoring of stroke events if the findings are validated in smaller areas by means of a specific stroke register following standardized methodology.

### MONITORING OF CARDIOVASCULAR DISEASES AND RISK FACTORS: RESULTS OF THE EUROCISS PROJECT

Mette Madsen  
*National Institute of Public Health, Copenhagen, Denmark*

In Europe cardiovascular diseases (CVD) contribute about 40% to overall mortality in persons 35 years and older. Ischaemic heart diseases and cerebrovascular accidents are the main CVD of interest because of their high prevalence in the population and possibility of prevention. Monitoring of CVD and their risk factors is a basic requirement for planning public health programmes. The purpose of the round table, proposed by the Research Group of the European Cardiovascular Indicator Surveillance Set Project - EUROCISS, would be to identify major cardiovascular indicators that can be considered reliable and comparable across the Member States of European Union, to describe methods for monitoring and to suggest recommendations for future implementation of CVD indicators in member countries.

### MONITORING OF ACUTE MYOCARDIAL INFARCTION AND CORONARY HEART DISEASE

Niklas Hammar  
*Division of Epidemiology, Institute of Environment, Stockholm Centre of Public Health, Sweden.*

**Background:** Coronary heart disease (CHD) is a major public health problem and a leading cause of death globally and in Europe. During the last decades CHD mortality and incidence of acute myocardial infarction (AMI) has declined in western European countries. In some other European countries the disease has increased. From the point of view of prevention it is important to follow incidence and prevalence of CHD in the population. The aim of this presentation is to describe ongoing activities for monitoring AMI and CHD in Europe.

**Methods:** Indicators for assessing the disease burden from CHD in a population that can be used in European countries have been identified by the European Cardiovascular Indicators Set (EUROCISS) project. An inventory of data available to monitor these indicators in 12 European countries has been developed.

**Results:** Indicators of CHD of central importance include mortality from CHD, incidence, attack rate and case fatality from AMI and prevalence of angina pectoris and heart failure. Of these indicators mortality from CHD is available for all 12 countries. In some countries information about incidence, attack rate and case fatality of AMI is available regionally, mainly through the MONICA project. In the Nordic countries information on these indicators may be obtained nationally by combining information on hospital discharges and deaths through record linkage. Information about hospitalised CHD is available in all 12 countries but does not provide direct information about disease occurrence. Prevalence of CHD may be assessed by survey methods but available survey data often lack important clinical measures.

**Conclusion:** CHD mortality and AMI incidence, attack rate and case fatality are covered nationally and/or regionally by ongoing monitoring activities in Europe. From the point of view of prevention it is important to preserve these activities and to extend them in time, geographically and to include also other indicators of CHD.

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#### MONITORING OF CARDIOVASCULAR RISK FACTORS

Susana Sans

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Cardiovascular diseases of atherosclerotic origin, are among the main causes of death, morbidity and disability in Europe. Although mortality and incidence rates of the principal cardiovascular clinical manifestations, i.e., coronary heart disease and stroke, appear to be declining in Western Europe, the public health burden of cardiovascular diseases is increasing in many countries, due to the aging of the population and to a higher prevalence of more chronic forms of disease. On the other hand, cardiovascular mortality rates are increasing in many parts of Central-Eastern Europe. Smoking, high blood pressure, high serum cholesterol, diabetes and obesity have been for a long time scientifically well established risk factors for the occurrence of atherosclerotic diseases in individuals. Also at the population level, the WHO-MONICA Project has demonstrated that they play an important, though not the only role in explaining the dynamics of atherosclerotic diseases in the populations. Their monitoring is therefore essential to understand changes in incidence and mortality and to evaluate public health and other medical interventions addressed to improve the public's health. However, many and important methodological and quality aspects need to be strictly adhered to, in order to obtain information on risk factors which is valid and comparable cross-culturally and along time. This type of issues are of crucial importance when establishing health information systems with the purpose to inform decision-making, given the resource implications and potential social impact involved in choosing action pathways based on that type of information. During the round table, the following topics will be addressed:- Sampling and external validity- Measurement methods- Data reporting- Resources needed to conduct valid risk factor surveys.

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#### RECOMMENDATIONS OF THE EUROCISS PROJECT

Simona Giampaoli

*Laboratory of Epidemiology and Biostatistics, Department of non communicable diseases, Istituto Superiore di Sanita, Italy*

**Background:** The European Cardiovascular Indicator Surveillance Set - EUROCISS - Project, within the framework of the Health Monitoring Programme of the European Commission, has as its objectives:- identify cardiovascular diseases of particular public health relevance by virtue of their frequency and possibility of prevention;- conducting an inventory of available morbidity indicators;- preparing recommendations for monitoring cardiovascular diseases in Europe. The purpose is to describe recommendations for the periodic monitoring of cardiovascular diseases to be used within different countries in order to obtain significant and reliable data.

**Methods:** Indicators for assessing the disease burden have been identified; an inventory of data available to monitor these indicators in 12 European countries has been developed.

**Results:** Mortality and hospital discharge rates are available at national level for both sexes and all ages in Europe; attack rates from registers, based on record linkage of current data, are available only in few countries at regional level, and are seldom comparable because of different diagnostic criteria. Prevalence and incidence are considered the best indicators but more sources are needed for their collection and require more time to be operative.

**Conclusions:** Because of different procedures and diagnostic criteria adopted, data on cardiovascular diseases are rarely reliable, nationally representative or comparable between countries. Since monitoring of both cardiovascular diseases and their risk factors is a basic requirement to plan public health programmes, quality of data and validation procedures are essential goals to be achieved. Standardised procedures as well as homogeneous diagnostic criteria are urgently needed to collect effective indicators for cardiovascular diseases.