

According to a study published in *Revista Española de Cardiología* (REC, the Spanish Journal of Cardiology)

Half of the patients at risk for cardiovascular disease are not receiving adequate treatment

- **Treating and controlling cardiovascular risk factors constitutes a key strategy in the primary prevention of cardiovascular disease. However, more than one third of Spanish citizens who have high blood pressure, diabetes mellitus or hypercholesterolemia do not meet the control criteria established by European Associations**
- **46% of hypertension sufferers, 36% of diabetics and 56% of those suffering from excess cholesterol fail to receive the appropriate treatment, according to the criteria set forth in the national guidelines for the proper control of these cardiovascular risk factors**
- **11% of men and 2.3% of women present a high or very high risk of coronary heart disease; indeed, having more than one cardiovascular risk factor, rather than entailing the mere addition of the respective probabilities of developing illness, means an exponential, as opposed to linear increase in the risk percentage.**
- **This was demonstrated in the DARIOS study, which is based on the analysis of eleven population registers and was conducted in our country during the 1st decade of the 21st century.**

Madrid, 13 October 2011.- The Spanish Society of Cardiology ([Sociedad Española de Cardiología or SEC](#)) warns that the percentage of the Spanish population with a good control of cardiovascular risk factors is no higher than, at best, 65%, and at worst, 34%. This is what the DARIOS study (dyslipidemia, risk of atherosclerosis, raised high-sensitivity C-protein and inflammatory and oxidative state in the Spanish population), published in the Spanish Journal of Cardiology ([Revista Española de Cardiología or REC](#)).

DARIOS, which was conducted by the [IMIM \(Instituto de Investigación Hospital del Mar\)](#) in Barcelona and funded by an untied aid from AstraZeneca, is based on eleven population studies conducted in our country during the 1st decade of the 21st century. This study included the participation of 27,903 people aged 35-74, randomly selected from the population of eleven studies conducted in ten autonomous communities during the 1st decade of the 21st century. The treatment received was analysed in those who presented with high blood pressure, diabetes mellitus and hypercholesterolemia or who consumed tobacco.

Despite the fact that it is well known that treating and controlling cardiovascular risk is a key strategy in terms of the primary prevention of cardiovascular disease (mainly myocardial infarction, angina and strokes), the control criteria established by domestic and European

scientific communities are not being met. It is therefore not surprising that cardiovascular disease remains the leading cause of death by disease in Spain and in Europe.

The majority of patients with high blood pressure examined during the study were receiving drug treatment, but 34% of the men and 58% of the women were inadequately controlled (blood pressure <140/90 mm Hg). According to Dr. Jaume Marrugat, member of the SEC and director of the Inflammatory and Cardiovascular Process Research Programme of the IMIM, *“This inadequate control could be due to a combination of poor compliance with treatment and a certain reluctance on the part of physicians to polymedicate in order to achieve blood pressure control”*.

The percentage of patients with well-controlled diabetes mellitus (glycated haemoglobin levels below 7%) was higher, rising to 65% of men and 63% of women. *“Patients probably perceive diabetes as a disease with well-known complications, which is why there is a better control of this cardiovascular risk factor”*, Marrugat says.

As regards high-risk patients, among those who suffered from hypercholesterolemia, nearly 40% were receiving drug treatment, although overall, 56% of participants with excess levels of cholesterol were inadequately controlled, according to the criteria of national associations. It was established that the degree of control was higher in women (49%) than in men (39%).

If the more stringent criteria of European associations were applied, only 3% of persons with high cholesterol levels would present with good control (total cholesterol target of < 200 mg/dl).

Surprisingly, both in the low- and moderate cardiovascular risk categories, which are those where lipid-lowering therapy is the least justified, and the high- or very high categories, more women received drug treatment for high cholesterol than men. *“This is probably due to the fact that at the time of choosing the treatments, it wasn’t taken into account that women have higher levels of HDL cholesterol (good cholesterol) than men”*, Dr. Marrugat adds.

According to DARIOS, 11% of men and 2.3% of women present a high to very high risk of coronary heart disease, meaning that they need an even stricter control of cardiovascular risk factors; indeed, having more than one cardiovascular risk factor, rather than entailing the mere addition of the respective probabilities of developing illness, means an exponential, rather than linear increase in the risk of suffering cardiovascular disease.

“This study has allowed us to analyse, on the one hand the degree of control achieved in terms of the main modifiable cardiovascular risk factors in the general population, and on the other hand, to examine the pattern of lipid-lowering treatment prescriptions or the lowering of lipids in blood according to cardiovascular risk”, Dr. Jaume Marrugat notes, *“we have discovered that, oddly enough, these tend to be mostly persons with a low coronary risk rather than those with more factors, and therefore at higher risk . These risk factors are often combined, which is why they are all taken into account when calculating risk. It is therefore preferable to tackle risk as a whole when deciding on the intensity of treatment rather than addressing each one individually”*, the specialist explains.

To prevent cardiovascular risk, it is essential to strictly follow the advice of specialists and to adopt a healthy lifestyle as early as from childhood, abstaining from nicotine, following a balanced diet and exercising regularly, adapting this to the possibilities and tastes of each individual, thus allowing to achieve a satisfactory body mass index.

***Researchers have published their entire database on <http://darios.imim.es/> to make it accessible to the scientific community and allow them to calculate the prevalence in Spain of any combination of risk factors, online, even if unpublished.**

Sociedad Española de Cardiología (SEC, the Spanish Society of Cardiology)

The *Sociedad Española de Cardiología* (SEC) is a scientific and professional non-profit organisation dedicated to increasing overall knowledge regarding the heart and circulatory system, making advances in the prevention and treatment of their diseases and improving the survival and quality of life of cardiac patients.

The main objectives of the SEC include contributing to international research, especially in Europe and Latin America, creating domestic and international links for development actions and representing all professionals with an interest in the field of cardiology.

For further information, please visit: www.secardiologia.es

For further information:

Press Office:

Sociedad Española de Cardiología - Fundación Española del Corazón / María Canle

Tel: 91 724 23 70

www.secardiologia.es

apple tree communications / Eva Sahis – Marta Melgosa

Tel: 93 318 46 69 / 636 39 57 24 – 665 527 130

Email: es@homeatc.com / mmn@homeatc.com